UNITED STATES BANKRUPTCY COURT
DISTRICT OF DELAWARE

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| IN RE: | . | Case No. 01-1139 (JKF) |
| | . | |
| W.R. GRACE & CO., | . | |
| et al., | . | USX Tower - 54th Floor |
| | . | 600 Grant Street |
| | . | Pittsburgh, PA 15219 |
| Debtors. | . | |
| | . | January 22, 2008 |
| . . . . . | | 9:07 a.m. |

TRANSCRIPT OF TRIAL
BEFORE HONORABLE JUDITH K. FITZGERALD
UNITED STATES BANKRUPTCY COURT JUDGE

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## INDEX

THE COURT: This is the continuation of the personal injury estimation trial in W.R. Grace, Bankruptcy Number 01-1139. The participants I have listed by phone, James Rieger, Alan Madian, Lewis Kruger, Daniel Glosband, John Wollen, Jonathan Brownstein, Daniel Speights, Sina Toussi, Kirk Hartley, David Beane, Debra Felder, Janet Baer, Andrew Craig, David Mendelson, Ellen Ahern, Jonathan Lewinsohn, John O'Connell, Theodore Freedman, Mark Hurford, Jeanna Rickards, Steven Mandelsberg, Jeff Waxman, Bernard Bailor, Peter Lockwood, Elihu Inselbuch, Walter Slocombe, James Wehner, Michael Davis, Terence Edwards, Edward Westbrook, Andrew Chan, Joshua Cutler, Timothy Cairns, Jacob Cohn, William Corcoran, John Phillips, Ari Berman, Seth Brumby, Katharine Mayer, Christopher Candon, Alex Mueller, Tiffany Cobb, Scott Baena, Jarrad Wright, David Parsons, Darrell Scott, Martin Dies, Theodore Tacconnelli, Leslie Kelleher, Beau Harbour, Elizabeth Devine, Jason Solganick, Matthew Russell, Robert Guttman, Francis Monaco, and Shayne Spencer.

I'll take entries in court. Good morning.

MR. BERNICK: Good morning. David Bernick for Grace.

MR. STANSBURY: Brian Stansbury for Grace.

MS. HARDING: Barbara Harding for Grace.

THE COURT: Excuse me one second, please. Okay. Thank you.

MR. BIANCA: Salvatore Bianca for Grace.

THE COURT: Good morning.

MR. FINCH: Nathan Finch for the Asbestos Claimants Committee.

MR. BAILOR: Bernard Bailor for the Asbestos Claimants Committee.

MR. INSELBUCH: Elihu Inselbuch for the Committee.

MR. MULLADY: Good morning, Your Honor. Ray Mullady for the Future Claimants Representative.

MR. ANSBRO: John Ansbro, also for the Future Claimants Representative.

THE COURT: Good morning.

MS. KRIEGER: Good morning, Your Honor. Arlene Krieger from Stroock and Stroock and Lavan on behalf of the Official Committee of Unsecured Creditors.

THE COURT: Good morning.

MR. HOROWITZ: Good morning, Your Honor. Greg Horowitz from Kramer Levin on behalf of the Equity Committee.

MR. KRAMER: Good morning, Your Honor. Matt Kramer, Bilzin Sumberg on behalf of the Property Damage Committee.

MR. FRANKEL: Good morning, Your Honor. Roger Frankel on behalf of the Future Claimants Representative.

THE COURT: Folks, I have two housekeeping matters to discuss with you before we begin. One concerns the schedule for tomorrow. I have a family matter, which means that I have to leave here at 5:00, so whatever schedule adjustments you

need tomorrow, we have to be finished at 5:00 tomorrow.

The second has to do with the schedule for March the 3rd and the 5th. Something has come up. I'm not going to be able to be here those two days, so I propose to cancel the trial on March the 3rd and the 5th and instead change the days to May 13th and May 14th, if you're available those two days. So could you please check. I've done some readjustment to my schedule, so we can fill those two days in if those two days are satisfactory with you. I understand that you may be asking for some additional trial days. I'm not sure if that's going to be necessary or not. Perhaps you can all talk and let me know. If you are -- if you do think you're going to need trial days, frankly, I think we better discuss that soon, because I have another matter that's also going to get heated up very soon that's going to take some very lengthy trial days, and I'm not going to be able to do them both at the same time. So we need -- I'm going to need some planning.

MR. BERNICK: Fine.

THE COURT: Okay. Mr. Bernick. Oh, sorry.

MR. MULLADY: Your Honor, I have one procedural issue to take up with the Court.

THE COURT: Yes, Mr. Mullady.

MR. MULLADY: Good morning, Your Honor.

THE COURT: Good morning.

MR. MULLADY: Just a small procedural point that I

don't think will be controversial. It's just a -- it's a procedural request and suggestion for the Court that stems from some moments we had last week during the examination of Dr. Rodricks. I think it's fair to say that counsel for both sides made statements in the presence of the witness that we believe should've been communicated at sidebar. We propose that going forward if counsel feel they need to make a statement or an argument or an objection that's more than just to state the objection and the grounds, that we ask the Court for a sidebar, or that the witness be excused, so we can have the airing of that discussion.

We don't seek a tactical advantage here. We seek really to just have a level playing field and to insure that we have a process that has the integrity to it that, you know, we think should be followed, which is that witnesses shouldn't be educated by statements or pushed in one direction or another by statements of counsel. And, obviously, the Court has the authority to institute a procedure like this under Federal Rule of Evidence 611(a), which gives the Court discretion to -- in fact, the obligation to control the method of examining a witness and the preparation -- or the presentation of evidence. Thank you.

THE COURT: All right. Is this controversial?

MR. BERNICK: I -- it's never been raised with me, Your Honor. I just heard it for the first time this morning,

so I don't have any issue with -- if there -- if it's expected there will be matters that require some significant discussion approaching the Court at sidebar, I also don't believe that this is, frankly, that big a deal, and I don't think that it would make sense to have a rigid rule that says that if you say more than objection, that calls for or objection to form, then immediately we then have to have a sidebar conference, which I think generally takes time to get organized and interrupt the flow of the examination that way.

THE COURT: All right. I think I'll let it up to counsel to ask if they think that something is going to require a sidebar to ask for it. I'm not going to do it if it's simply, you know, an objection to the hearsay rule. Frankly, I think most of your witnesses, to the extent that they're experts, have already been educated by counsel in the requests that you've been making of them beforehand anyway. They're not new, most of them, to this process. They either testified or been involved in writing reports in many cases not just this one. So I doubt that they're very surprised by most of counsel's opinions, but I'm not opposed to their request in an appropriate circumstance.

MR. MULLADY: Thank you, Your Honor. And, obviously, we're not -- the purpose of this request isn't to curb simple objections of that nature, but I think if the Court were to go back and read the transcript from last week -- and I'm sure

Your Honor recalls -- there was a lot more than that that was said, and it was on both sides. Again, this is not -- we're not pointing fingers. We're not on a high horse. All we're asking for is that if this sort of thing has to be aired, that it be aired outside the presence of the witness.

THE COURT: All right. That's a fair request, and I'll let it up to -- as I said, to both counsel to ask for it when you think the circumstances -- on all sides that is -- to ask for it when you think the circumstances are appropriate.

MR. MULLADY: Thank you, Your Honor.

THE COURT: Anything else before we begin?

MR. BERNICK: May we proceed, Your Honor?

THE COURT: Yes, sir.

MR. BERNICK: We call as our next witness Dr. David Weill. Dr. Weill is here. If you could take the stand?

THE CLERK: Please stand and raise your right hand.

DR. DAVID WEILL, DEBTORS' WITNESS, SWORN

MR. BERNICK: Good morning, Dr. Weill.

DIRECT EXAMINATION

BY MR. BERNICK:

Q Could you please just tell the Court at the outset what the principal focus of your testimony will be here this morning?

A My principal focus is to speak about the attribution of lung cancer by asbestos.

MR. BERNICK: Okay. There was a chart that we showed in opening here. If we could call up GG-2121?

Q Do you have that in front of your screen there, Dr. Weill?

A I do.

Q I explained to -- I presented to the Court what we intended to do with respect to the -- what we called the exposure filters part of the analysis, and I distinguished it from what you see down in the bottom right-hand corner as the disease filters part of the analysis. What specific matters will you be focused on here?

A I'll be speaking about the disease matters.

Q Okay. Will you be offering -- will you also be addressing today -- let me just ask a couple more specific points. Will you be addressing certain aspects of the diagnostic criteria for asbestosis?

A As they relate to the pulmonary function testing specifically.

Q Okay. Apart from the pulmonary function test, will you be addressing today the practices of the litigation screening doctors?

A No, I will not.

MR. BERNICK: Thank you. With the benefit of that, Your Honor, we'd like to go through some of the witness' background and qualifications if the Court and the witness can be shown GG-2117?

VOIR DIRE

BY MR. BERNICK:

Q Looking at this demonstrative, Dr. Weill, could you please just take the Court briefly through your educational background and your medical training?

A I received my undergraduate degree from Tulane University in New Orleans in 1985. I then went to Tulane Medical School and graduated in 1990.

Q Okay.

A After residency training at the University of Texas Southwestern I did my pulmonary and critical care fellowship in the early nineties at the University of Colorado.

Q Okay.

A I also did an additional one-year fellowship in lung transplantation.

MR. BERNICK: Okay. Let's show the witness and the Court GG-2118.

Q And again if you could simply continue on, Dr. Weill, and review your further training as reflected in that demonstrative?

A My current position is Director of the Lung and Heart/Lung Transplant at Stanford University. I'm an Associate Professor in the Division of Pulmonary and Critical Care Medicine. I am board certified in pulmonary medicine.

Q On a day-to-day basis, Dr. Weill, could you tell the Court

what it is that you do?
A We have a varied practice where we're referred a large number of patients with a variety of advanced and early stage lung diseases that are amenable either to novel medical therapy or surgical therapy.
Q Okay, and what is it that you do in connection with that practice?
A I specifically diagnose patients, provide a second opinion about some of the lung disease issues, and then recommend a treatment scheme that could either be medical or surgical depending on the patient's needs.
Q Okay. Let's focus on asbestos. Do you have a background in asbestos-related matters?
A Yes.
MR. BERNICK: I'd like to show the witness the next demonstrative, which is 2119.
Q And again using that as our menu, Dr. Weill, if you could walk the Court through the background that's reflected on 2119?
A I'm a NIOSH Certified B Reader which indicates proficiency in interpreting x-rays for the pneumoconiosis. I also participated in a visiting professorship in China at the National Institute of Occupational Medicine and Poison Control. I've also provided testimony in a few different governmental bodies, including twice in the United States Senate and once in the Texas State Legislature. And I've published in the medical

literature on a variety of end-stage lung diseases, including specifically in transplantation, transplant medicine, asbestos-related diseases, and lung cancer.

Q Focusing on your experience in China and turning your attention to Slide 2120, could you talk about what you did in China and the relationship, if any, that that has to your experience with asbestos?

A I was interested in seeing a more varied patient group that had been exposed to a variety of occupational substances and went to China for approximately one month to consult with the Chinese doctors who were interested in the same field.

Q Okay, and what is it that you had an opportunity to do there?

A I saw patients that had a variety of occupational lung diseases. Most commonly asbestos-related diseases or silica-related diseases and was able to not only see the patients themselves but also review a large number of radiographs.

Q Okay. Have you had any activities in the area of litigation? Have you served as an expert in connection with litigation?

A Yes, I have.

Q Could you just describe for the Court in general terms what your litigation-related activities have comprised?

A Over the last five to six years I've provided deposition testimony and expert opinion regarding individual cases

primarily.
Q Okay. Have you ever actually had the opportunity to testify at trial, or is this your first -- your first testimony in trial?
A I've testified once in an occupational lung disease matter at trial.
MR. BERNICK: Okay. Your Honor, we would proffer Dr. Weill as an expert in pulmonary medicine.
THE COURT: Any voir dire?
MR. MULLADY: No, Your Honor. No objection.
MR. FINCH: No, Your Honor.
DIRECT EXAMINATION
BY MR. BERNICK:
Q Let's talk about the principal focus of your testimony --
THE COURT: Would you like --
MR. BERNICK: I'm sorry. I'm trying to get through this this morning, and it's bright and early.
THE COURT: Without objection, the witness may offer an expert opinion in the field of pulmonary medicine. Okay.
MR. BERNICK: Thank you, Your Honor. I'm sorry.
BY MR. BERNICK:
Q Let's talk about -- let's focus immediately on the primary focal point of your testimony, which is the relationship between lung cancer and asbestos exposure. And I'd like to just have you give a brief explanation of lung cancer to the

Court showing you GG-2122. Would this demonstrative assist you in explaining particularly the locus of lung cancer?

A Lung cancer exists within the lung parenchyma, which is the lung meat itself. It has many causes but is most commonly causes by cigarette smoking around 90 percent of the time. The issue that I was asked to address is its attribution to asbestos exposure, and we'll spend the majority of my time talking about that today.

Q Now, you indicated that lung cancer arises in the parenchyma or the meat of the lung. Is that consistent with what's indicated as the yellow box on 2122?

A Yes, it is.

Q Okay, and are we going to talk, as we go forward today, about anatomically distinct in different areas within the area of the lung?

A Yes.

Q Okay. Let's talk then about asbestos directing your attention to Exhibit GG-2123. Is this a parallel slide that deals with asbestosis?

A Yes.

Q Okay. Well, let me just take you through this a little bit more deliberately. First of all, location. When we talk about asbestos, what location in the lung are we talking about?

A So when we're --

MR. FINCH: Objection, form of the question.

Asbestosis.

MR. BERNICK: I said asbestosis. Didn't I?

MR. FINCH: I thought you said asbestos.

MR. BERNICK: Oh, I apologize. Asbestosis. Thank you.

Q What location are we talking about when we talk about the location of asbestosis?

A So like lung cancer, asbestosis is also a parenchyma lung disease, meaning as the yellow box indicates, it's actually existing in the meat of the lung.

Q Okay, and parenchyma, what -- that's a longer term. Just what does that refer to?

A It refers to the lung tissue itself.

Q Okay. It says fibrosis. That asbestosis is a fibrosis. What does fibrosis mean?

A Scarring of the lung, quite literally, and a fibrotic process is anything that scars a lung and is not specific to asbestos-related diseases.

Q Okay. Now, are there other areas within the vicinity of the lung that can also experience or sustain a fibrotic condition as a result of asbestos exposure?

A Yes, that's the covering of the lung or the pleura.

Q Is that indicated also here on 2123? That is the difference between parenchyma and pleura.

A The pleura in this slide would be the outside covering of

the lunch where the arrows are pointing.
Q Okay. Okay. Now, let's go through -- do we have some examples of x-rays showing what it is that you're looking for when you're looking for asbestos, showing you 2124?
THE COURT: I'm sorry. Would you repeat the question for me, please?
MR. BERNICK: Yes.
Q Showing you 2124 -- GG-2124, would that help you explain to the Court the conditions that you observe in x-rays where there is asbestosis present?
A Sure. On the left side of the panel you see a normal lung, and what you're looking for are the aerated portions of the lung which are black. There's also white parts of the lung in a normal situation which are blood vessels that are running through the lung, and that's normal. On the right side of the panel you're seeing a lung that's affected by asbestosis.
Q Okay. In what -- and in particular, so the record is clear, there's a part that's marked as -- with a circle saying fibrosis. What is it that's being seen through the x-ray in that portion of the x-ray?
A What you're looking at in the area that's circled, they're small linear opacities, areas of the lung that are scarred by asbestosis.
Q You said opacities. Does that have it's common meaning that it's something that you have a hard time seeing through?

A Yes, it's white. It shows up white in the lung.
Q Okay. Let's now talk about the relationship between these two conditions that you've described, asbestosis and lung cancer. Can there be asbestosis without lung cancer? Does that condition arise?
A Yes.
Q Okay. Are they different diseases? That is is lung cancer a different disease then asbestosis?
A Yes.
Q Okay. What about the other way around? Can you have lung cancer without asbestosis?
A Yes.
Q Okay, and most common cause?
A Cigarette smoking.
Q Okay. Now, I want to focus on the particular kind of lung cancer that is asbestos related -- that is asbestos-related lung cancer. In your opinion, which we'll pursue, can you have asbestos-related lung cancer in the absence of asbestosis?
A No.
Q Okay. Do you have a slide that frames in more precise terms that question. That is --
MR. BERNICK: Could we show GG-2125?
Q And I'll ask you to simply go through with the Court how this slide frames the issue that you've addressed.
A What the essential question is, I believe, is whether or

not asbestos exposure alone increases one's risk for developing lung cancer, so in the absence of asbestosis. And then the second part of that analysis is whether or not asbestosis is a necessary prerequisite to attribute asbestos exposure or lung cancer to asbestos exposure.

Q Okay. Are there studies that have been done -- research that has been done that bears upon that question? That is whether asbestos exposure alone without asbestosis causes lung cancer?

A Yes.

Q Showing you 2126, does this provide a list of the kinds of studies that you've examined that relate to this question?

A Yes.

Q Could you just explain to the Court the difference between these studies and whether there are any differences in the quality of -- let me take that back. Whether some of the studies are better and some of the studies are less good in terms of speaking to the particular issue that you are here to address?

A Yeah, there are varying levels of evidence around this question, as you might imagine, and even within these categories there's different levels of evidence. Some of the scientific literature, even say in the longitudinal area, are better than others.

Q Okay. Let's just go through what's the difference between

the longitudinal study and the case control study?
A A longitudinal study is defined by an exposed cohort, and that cohort is followed prospectively, and causal relationships are then ascertained by following that cohort for a number of years.
Q Okay. What about case control? Doesn't case control involve cohorts?
A It does, and the co --
Q So what's the difference then?
A There is a difference in that the case control, as the name implies, is defined by having a disease itself rather than necessarily having an exposure itself.
Q Okay. What about time sequence? In case control studies do you have the ability to follow a group over time?
A You don't, because the case itself is defining the cohort, and so what you're left with is actually looking at the disease that you're interested in studying, and sometimes looking backwards to determine causal relationships, for instance.
Q So it's like you begin at the end of the line with people who are sick, and then working with that group you look to antecedents?
A Correct.
Q Okay, or you look to factors?
A That's right.
Q Okay. What about the autopsy studies? What are -- what

do they involve, and why are they different from longitudinal and case control studies?

A Autopsy studies are studies that have lung tissue as its very basis. So they look at patients that have passed away, lung tissue is examined, and causal relationships are attempted to be determined by looking at that lung tissue and then finding out more about the patients that passed away.

Q Okay. Now with respect to the longitudinal studies, let me just ask you, how do these different kinds of studies stack up in terms of which ones are, you know, more useful and more productive to examine in order to address your questions, case control, longitudinal, or autopsy?

A Generally speaking, the longitudinal studies are the best, although their quality varies within that subgroup. But, generally speaking, longitudinal studies are the best.

Q Are there a lot of longitudinal groups that have been examined over time that relate to this issue?

A Unfortunately not. They're very difficult to perform because of their time course, how long it takes to get to the answer, and very few research units are able to look at these factors over a period of time and collect data on the cohort.

Q Turning your attention to Slide GG-2127, what does this slide now do with respect to the issue that you've addressed here?

A So in terms of the attribution of lung cancer, I've put on

this slide longitudinal studies, case control studies, and autopsy studies that I think address this issue.

Q Okay, and then what you have is 1 and 2. What are the columns? What do they refer to?

A They refer to the initial question that I framed, the two groups of thought regarding attribution of lung cancer to asbestos. Is asbestos exposure alone that's necessary, or is it the presence of asbestosis?

Q Okay. Let's begin with the insulator studies. How far back do the insulator -- does the insulator group go in terms of the group that was being studied?

A Dr. Selikoff at the Mt. Sinai Group really developed this cohort in the 1960s and followed it for a number of years afterwards.

Q Okay. Now, you have under the question, "Does asbestosis cause lung cancer? Yes, but do the -- does asbestos exposure alone cause lung cancer, question mark." Could you explain to the Court what you were able to learn and what you were not able to learn from the insulator studies.

A When you look at Dr. Selikoff's insulator studies, you do see an increased rate of lung cancer. However, what's important about those studies is that he was not able to ferret out who was just asbestos exposed alone versus who had asbestosis.

Q And why was that?

A He did make that effort initially with a cohort to make that distinction.
Q Okay. In other words, would it be fair to say -- was the study originally designed -- was the insulator study originally designed to address the specific issue that was of interest to you?
A No, it was not.
Q Okay, and what in particular was missing from the design that would've enabled that study to speak more directly to the issue that you were interested in?
A It was the lack of information regarding who has asbestosis, the parenchymal lung disease, and who is just asbestos exposed.
Q Why then did you fill in the column under 2, "Does asbestosis cause lung cancer? Yes?"
A If you follow Dr. Selikoff's work -- now we're up into the late eighties -- there were publications coming out of that group that tried to answer that question specifically in whom radiographic and pathologic evidence was available.
Q Okay, and what did that evidence tend to show?
A The evidence showed that in 100 percent of the cases where lung tissue was available, 100 percent of the lung cancer cases had asbestosis by lung tissue.
Q Okay. Let's turn to the second study that you have or the second group, the asbestos cement studies. Could you describe,

first of all, who performed those studies and when they were performed?

A This was performed -- this study was performed by a group of researchers at Tulane University beginning following the cohort in the late sixties and following the cohort really through their publication in the early 1990s.

Q Now, Tulane sounds familiar.

A Yes.

Q That's where you went to school?

A It is.

Q One of the authors also has a familiar name, Weill.

A Yes.

Q Is there any relation?

A He's my father.

Q Okay, so if you could describe for us the workers who were studied in this Tulane study, who were they?

A They were a group of asbestos workers, 839 workers, who had mixed asbestos exposure, meaning some to chrysotile-type fibers and some to amphibole-type fibers.

Q Okay, and then what happened during the course of the study? What did the study comprise?

A The researchers were able to prospectively follow this group in a longitudinal fashion where they had well-defined exposure categories and radiographic information.

Q Okay, and now you have the columns -- both columns filled

out in this case. Under the column dealing with, "Does asbestosis cause lung cancer," you have a yes, and now you've also filled in the first column, "Does asbestos exposure cause lung cancer," and you have it filled in no. What was different -- what, if anything, was different about this group in this study that enabled you to answer the first question whereas the insulator studies did not permit you to answer that question?

A Because the insulator studies were never set up that way, they were never able to answer the first question. The asbestos cement studies were specifically set up to answer that question, is asbestosis a necessary prerequisite for lung cancer development.

Q Okay. Are there a couple slides that would help you walk through the actual data from those studies, give two slides that have been prepared here?

A Yes.

Q Okay. Showing you, first of all, 2129 -- that is GG-2129 -- could you describe for the Court -- first of all, is this slide -- the data here, is it taken directly from the published article itself?

A Yes, it is.

MR. BERNICK: Okay. And, incidentally, the published article, Your Honor, for the record is Exhibit 590. That is GX-0590. We won't be offering it, because it's a learned treatise, and it comes in in support of his opinion. But, for

the record, this demonstrative --
Q Is it correct, this demonstrative is based upon the article?
A Yes.
Q Okay. What is it that 2129 -- that is GG-2129 shows the Court?
A So on the horizontal axis of this graph there's cumulative exposure in fiber years. So that's a way that researchers, when they're doing epidemiologic studies, can quantitate the asbestos exposure.
Q Okay. What then would the data points that you have as displayed in this graph tell you about the relationship between exposure in fiber years and the relative risk for lung cancer?
A So what it can tell you is that as the exposure -- cumulative exposure dose goes up, the risk of developing lung cancer increases as well.
Q Okay. Is that a continuous relationship down to zero?
A No, it's not.
Q Well, then tell us what is it that happens when you get down to lower exposures?
A The shape of the relationship or the shape of the curve becomes uncertain at the lower exposure levels.
Q Okay. Well, there's been discussion in connection with the opening statements in this case regarding threshold models. Actually, also in connection with the testimony that was

offered by Dr. Rodricks last week. Do you have an understanding of about what a threshold model is?

A Yes.

Q Okay. Could you just explain to the Court what a threshold model is?

A A threshold in epidemiologic and occupational medicine is the concept that a certain level of exposure is necessary to attribute risk of developing whatever disease you're interested in.

Q Okay. In where you have the threshold, do you -- are you able to see increased risk all the way down to small exposures?

A You're not, because you're not certain, as this slide indicates, of the dose response relationship, i.e., what dose gives you what response.

Q Okay.

A And you're uncertain at these lower exposure levels what that response is.

Q Okay. Now, based upon this data -- that is that at higher exposures there was an increased risk of lung cancer -- wouldn't that tend to suggest higher does lung cancer? Going back to your question, yes, there is a relationship between asbestos exposure alone and lung cancer.

A The researchers looked at that issue --

Q Okay.

A -- and what they found is is that it wasn't a distinction

between dose that really mattered. In other words, it wasn't that every single increasing dose increased your risk for developing cancer. Instead, what they found is that the dose was not the distinguishing factor. The presence of radiographic asbestosis was when we look at lung cancer risk.

Q Turning your attention to Slide 2128, is this a further slide that was taken from the Hughes and Weill study?

A Yes.

Q And what does this slide show, and how does it relate to what you just said?

A On the vertical axis again it's looking at risk and standardized mortality rates, and on the horizontal axis, you're looking at various abnormalities of x-rays. So various profusion categories, to use the ILO lingo.

Q Okay, so if we go from the left to the right, we have the first data area. It says, "No abnormal less than 21 years." What does that mean?

A So there were no chest radiographic abnormalities in that group, and these were people that worked less than 21 years --

Q Okay.

A -- in the cement industry.

Q And did they have an increased risk of lung cancer?

A No.

Q Let's now talk about the people who worked for a long time. Would that mean that they have higher or lower

exposures?
A Higher.
Q Because the people that have higher exposures but who also did not have radiographic abnormalities, is that the second data point?
A Yes.
Q And what was found with respect to them? Did the people with higher exposures but no abnormalities, did they or did they not have an increased risk of lung cancer?
A No increased risk in that group.
Q What about pleural? That is people who have pleural abnormalities. First of all, are those people who have the opacities in the meat of the lung that we were talking about, or they are the ones who have a condition in the pleura?
A Abnormalities of the pleura.
Q Okay. Was that found to be tied to lung cancer risk?
A No.
Q Now, we have small opacities. What are we referring to now?
A In this instance we're referring to patients who have -- again to use the ILO lingo -- a zero slash one chest radiograph.
Q Okay. Zero slash one, we're going to get to that, but is that a strong indicator of there being opacities?
A No, everyone really considers that a normal film.

Q Okay. Now, once we get to the people who have small opacities with the one slash zero plus, who are those people? That is what are we getting at when there's a reference to small opacities with a one slash zero plus?

A So those people clearly have radiographic evidence of asbestosis.

Q Okay, and with respect to the people who have radiographic asbestosis -- evidence of asbestosis, what, if any, observation did you make as to whether that was related to an increased risk of lung cancer?

A The researchers found that it did increase the lung cancer risk over four times.

Q Okay. Showing you then Slide 2130 -- GC-2130, is there -- together with the statistical evidence, tell us whether there is any theory -- mechanistic theory that would draw a relationship between lung fibrosis and lung cancer.

A Researchers have been interested in the fibrosis question from a biochemical standpoint for some time, greater than 20 years. The slide here really depicts a plausible hypothesis for how lung cancer has as its prerequisite fibrosis, and I can walk through the slide, if you'd like.

Q Yeah, just -- if you'd just do that. Spare us I guess. A little bit briefly. It's here in the morning --

A I understand.

Q -- and I'm very confident that Dr. Mullady over there will

have detailed questions on this part of your examination.
A Anybody that wants more information can see me afterwards.
Q Okay.
A The stimulus in this case is asbestos, and so what asbestos does, as the slide depicts, is cause an inflammatory process in the lung. Most inflammatory processes, whatever they're caused by, can be repaired in the lung, and that's why every exposure and everything that happens to us doesn't cause disease. But what can happen when the defense strategies are overwhelmed, these inflammatory processes can get unchecked and out of control, and various mediators, including things like growth factors and cytokines that I won't bore you with, cause a lung injury pattern, and they have -- and fibrosis and lung cancer have these mediators in common. And so when we look at the epidemiologic evidence, we're looking at the causal association, which I think makes sense, but then this develops the why part. Why is lung cancer attribution -- why is asbestosis a necessary prerequisite? And I think what you get from this model is a biologically plausible explanation that they're common mediators that lead to both diseases.
Q Okay. Now is there anything else in the literature in other areas besides asbestosis that would be consistent with the model for fibrosis-related cancer that you've just described?
A Yes, there are.

Q Okay. Showing you 21 -- GG-2131, does this slide again provide a list of those areas of research?

A Yes, it does.

Q Okay. Can you just explain those entries briefly?

A The literature on fibrotic lung disease has as one of its components the concept that diffuse fibrosis of other causes apart from asbestos exposure like idiopathic pulmonary fibrosis, scleroderma, or sarcoidosis. All are associated with an elevated cancer risk. And I think this was initially shown probably most elegantly by Dr. Turner-Warwick and her group in London 1980 when she looked at the cryptogenic fibrosing alveolitis group, which in America we call IPF, idiopathic pulmonary fibrosis. And she found a fourteenfold increase in lung cancer rates in those patients that had that condition.

Q Okay, and what about Weill and McDonald? Did they -- did that paper also bear upon this?

A It did. It looked at an occupational-exposed group in this case, workers that had silicosis, and their opinion was that also -- the presence of silicosis increased the cancer risk.

Q Okay. Turning back to our original question, Dr. Weill, and Slide 2132, how do you ultimately answer the question about whether asbestos exposure alone without asbestosis causes lung cancer?

A So based on what we've talked about so far, I've been able

to conclude from my review of the literature and my understanding of it, that asbestos exposure alone does not increase the risk of developing lung cancer.

Q Are you aware of any reliable scientific work that specifically addresses this issue that is exposure alone versus asbestosis -- and I want to focus on this -- produces reliable data that is specific to this issue -- specific to this issue which shows the contrary? That is it's not asbestosis. It's asbestos exposure alone.

A No.

Q Are there other authors -- other authors of papers who have expressed opinions on this subject that are consistent with your own?

A Yes.

Q Showing you GG-2138, is this a list of some of the other papers that reflect opinions that are consistent with your own?

A Yes, it is.

Q Now, I want to turn from the conclusion that you've express to talking about a couple of other related issues. First of all, have you or have you not considered the concept of synergy as applied to this issue?

A I have considered that.

Q Okay, and do you have a slide that illustrates the concept of synergy?

A Yes.

Q Showing you GG-2133, could you explain what 2133 delineates and why that would be relevant to the question of whether asbestos alone can cause lung cancer -- asbestos exposure alone can cause lung cancer?

A This slide again depicts what was concluded from the Selikoff insulator studies, and if you look at the left side of the slide, it looks at the relationship between asbestos exposure alone and cigarette smoking. And Selikoff and his group concluded that those two factors work synergistically to increase the risk of lung cancer.

Q Okay. If that is true, that is if the synergy is between asbestos exposure alone and smoking, what relationship, if any, would that -- have that -- would that bear to your basis question, which is whether asbestos exposure alone can cause lung cancer?

A It doesn't really answer that question, because again it doesn't ferret out the patients or identify the patients specifically who have reliable evidence of asbestos.

Q Is there a slide, showing you GG-2134, which talks about whether the Selikoff insulator studies support the idea that asbestos exposure alone together with smoking but absent asbestosis, whether that can cause lung cancer?

A There is not an ability from the information in the insulator studies to examine that specific question, and so, in my opinion, they were not able to make the synergistic

relationship that this slide depicts.
Q Okay. Now again is that the same kind of limitation that you described before as the limitation on being able to tease out the asbestotics from the people who were simply exposed to high levels?
A That's right.
Q Okay. Likewise, going through to Slide 2135, when it came to the Hughes-Weill study, did the Hughes-Weill study provide specific information on this issue?
A It did.
Q And could you, using 2135, explain to the Court what specific information was supplied by the Hughes-Weill study and how it bore upon the question of whether -- of what the synergy was?
A So since all of the lung cancers in the asbestos cement cohort existed in smokers, and the risk of developing lung cancer due to asbestos exposure was confined to the asbestotics, a synergistic relationship was able to be demonstrated not between asbestos exposure alone in cigarette smoking but instead asbestosis and cigarette smoking.
Q Okay, and has that been illustrated in Slide GG-2136?
A Yes, it is.
Q Okay. Now, the synergistic relationship between smoking and asbestosis, would that or would that not be consistent with the biological mechanism that you described to the Court?

A It is consistent.
Q Okay. There's been reference here in this case to the Helsinki criteria. Are you familiar with the Helsinki criteria?
A Yes, I am.
Q And have you considered the Helsinki criteria when it comes to addressing the question of whether asbestos alone is causally -- asbestos exposure alone is causally related to lung cancer?
A I have.
Q And what consideration have you given to it?
A The Helsinki criteria, as it's stated, is a consensus opinion among people working in the field about, among other things, the lung cancer/asbestos story.
Q Okay, and what weight do you give that in your assessment of the actual epidemiological data?
A It's not an epidemiologic study itself. It's an opinion piece of people that have worked in the field came together to discuss these issues.
Q Okay. Have you looked to see what some of the purposes were that drove this consensus effort?
A Yes.
Q Showing you Slide 2137, does that reflect whether or not compensation was one of the factors that was a goal in connection with the Helsinki criteria?

A Yes, it was.

MR. FINCH: Objection. Lack of foundation. He wasn't a member of the Helsinki criteria. He doesn't know what was in the -- this is a snippet of a multi-hundred-page document. The summary is a ten-page document. I don't believe he has the foundation to explain to the Court what was the goal of the Helsinki.

MR. BERNICK: Well --

THE COURT: Mr. Bernick.

MR. BERNICK: -- it's very simple. I --

BY MR. BERNICK:

Q Does this come from the Helsinki document?

A Yes.

Q Okay, and do the words say appropriate compensation?

A Yes, they do.

Q Are they the basis for the assessment that you made based upon your expertise regarding what assessment or what weight to give to the Helsinki criteria?

A Yes.

MR. BERNICK: Okay.

THE COURT: All right. Just a second. Let me read it.

(Pause)

THE COURT: All right. This is the type of information that an expert in his field would consider in

issuing an opinion. So although the question as stated I agree was objectionable, I believe at this point Mr. Bernick has cured that objection by asking whether or not now this information serves as a basis for this expert's opinion, and now that objection has been cured. Okay.

MR. BERNICK: Thank you.

BY MR. BERNICK:

Q Now, I want to turn a little bit now to talking about making the transition from what you've told us about the relationship between asbestosis and lung cancer and the work that has been done specifically in connection with this estimation. And I want to go back to -- let me just ask you a general introductory question. Are there published criteria for the diagnosis of asbestosis?

A Yes, there are.

Q Okay. Who has published -- what group has published criteria with respect to the diagnosis of asbestosis?

A Primarily, the American Thoracic Society.

Q Have you examined the history of the American Thoracic Society publications to determine whether or not there has been any change or evolution in those criteria?

A I have.

MR. BERNICK: Okay. Your Honor, at this point we would offer GX-0280 and 0274.

THE COURT: Wait. I'm sorry. What are you offering?

MR. BERNICK: Well, I -- I'll tell you we'll do it the old-fashioned way. I'm sorry. These are in the binders. They are GX-0280 and GX-0274. And may I approach the witness?

THE COURT: Yes.

(Pause)

Q Are you familiar with those documents, Dr. Weill?

A Yes, these are the ATS statements.

Q Okay, and is Exhibit GX-0280 the 1986 statement, and is GX-0274 the December 12, 2003 statement?

A Yes.

Q And are these recognized statements within the field of pulmonary medicine?

A Yes.

MR. BERNICK: We would offer them, Your Honor.

MR. FINCH: No objection, Your Honor. I think there is duplicative exhibit labeling. I mean the ACC and FCR have also identified these as exhibits, so at an appropriate time we'll give you the ACC and FCR number that is the same document. We have no objection to the admissibility of either document.

MR. MULLADY: No objection.

THE COURT: All right. GX-0280 and GX-0274 are admitted.

MR. BERNICK: Okay.

BY MR. BERNICK:

Q Now has there been any change in the diagnostic criteria for asbestosis reflected in these documents? That is from the eighties until more current times.

A There have been.

Q Okay. Could you just describe to the Court what has happened to the diagnostic criteria for asbestosis that is of relevance to your testimony here?

A Some of the components are similar, but probably the most distinct difference is with regards to the degree of radiographic abnormality that each statement supports.

MR. BERNICK: Okay. I want to approach, if I can? Do we have a marker? And I'll just slide this over here. Is this all right, Your Honor?

THE COURT: Yes.

MR. BERNICK: Thank you.

Q B-readers read what?

A Radiographic -- x-rays from people that are exposed to various dust-related diseases.

Q Is there a classification or rating system that the B-readers use in doing their evaluation?

A There is.

MR. BERNICK: Can we -- you know what you might do is just -- do you have a clip -- a big clip? I think if you put it down further it might be a little bit easier, or not? Okay. Okay. No. Well, I'll just hold onto it. Okay.

Q The B-readers when they're doing x-rays, do they have a rating system?
A Yes.
Q And what's the -- does it -- is it comprised basically of two numbers with a slash in between?
A Yes, but in terms of the profusion category, the parenchymal abnormalities, yes.
Q When it comes to parenchymal, we're now again in the meat of the lung --
A Right.
Q -- and we're looking for abnormalities.
A Correct.
Q Okay, and you've made reference to opacities. Is that what we're looking for?
A Yes.
Q Okay, so we're looking at the x-ray, and we're saying do we see opacities or not.
A That's right.
Q And is this a system that's designed to rate the degree to which opacities are being found?
A Yes.
Q What's -- what are the numbers that -- what's the range of numbers?
A So there's 12 categories from zero slash zero all the way to three slash three --

Q Okay.
A -- with all the steps along the way.
Q And the higher the number means more opacities.
A That's right.
Q What does the first number refer to versus the second number?
A The first number is to indicate what the reader has the most confidence in in terms of the profusion category.
Q Okay. Now, under the ATS standards -- the earlier ATS standards, was there or was there not a guidance or a recommendation about the minimum finding of opacities that would support a diagnosis of asbestosis?
A There was.
Q Okay, and what was it?
A One slash one.
Q Which means?
A That the reader first considered the x-ray abnormal to the degree of one, and that he did not or she did not consider any other profusion category.
Q Okay. What was the change? As we went forward with the diagnostic criteria as recommended by the ATS, what changed?
A The 2004 statement indicates that a profusion category of one slash zero is sufficient to make the diagnosis.
Q And that would be -- mean what?
A That the reader had the most confidence in a profusion

category of one, would also consider that the x-ray was normal, i.e., a profusion category of zero.

Q Okay. Now, I want to ask you a question that's very, very specific here. Is there any -- is the category -- there's only one -- two lower categories, right, the zero slash one and the zero slash zero.

A Right.

Q Are either of those categories or ratings considered to be abnormal?

A No, they're normal.

Q Okay, so am I correct that under the new standard any reliable B read which finds any changes in the parenchyma equals asbestosis today?

A That's right.

Q So as long as there's any reliable radiographic evidence showing changes of the parenchyma, bingo, asbestosis?

A That's right.

Q Okay. I guess it doesn't really matter that much anymore. Let's go back to GG-2139 and spend a minute walking through what 2139 illustrates. We have your same old icons. We have asbestos exposure alone. We have asbestosis, which you say has been tied to lung cancer. That's the yes. But it then says -- it then has asbestosis kind of growing as a category, and it says today includes reliable radiographic evidence of any asbestosis-related parenchymal lung change. Is that or is that

not accurate?
A Yes, it is.
Q And given what the -- what's happened to the diagnostic recommendations of the ATS, when you talk about asbestosis, are you talking about a smaller group than was true historically, the same group, or a broader group?
A Likely a broader.
Q Thank you. In light of that, today does, quote, asbestosis exclude anybody who has reliable radiographic evidence of any parenchymal lung change?
A Yes, it does.
Q Who does it exclude?
A It excludes anybody with a normal chest radiograph.
Q Okay, so I think I've probably -- you didn't hear my question or answer it the right way. Does the diagnosis of asbestosis exclude anybody with reliable radiographic evidence that they do have a lung change?
A No, it doesn't include anybody.
Q Okay. Let's turn then to the Henry study. Are you familiar with the Henry study?
MR. BERNICK: And for the record, the Henry study, Your Honor, is comprised with -- by a series of exhibits. They'll be offered in through Dr. Henry. They are GX-284, 285, 286, 317 --
THE COURT: I'm sorry, Mr. Bernick, you're going too

fast for me.

MR. BERNICK: I'm sorry.

THE COURT: Could you start the numbers again?

MR. BERNICK: Yes, it's -- Henry is GX -- let me do them in order, 104, 284, 285, 286, 317, and 582.

MR. FINCH: Are you offering them now?

MR. BERNICK: No, they'll be offered through Dr. Henry.

THE CLERK: Mr. Finch, please find a microphone.

MR. FINCH: Sure. My question is was he offering them now. And since he's not offering them now, I don't have any basis to object now.

MR. BERNICK: Okay. Did you -- do you want me --

THE COURT: I will ask something. May I ask a question, because I think I got off on a track somewhere, and I've gone -- I got confused. Doctor, do I understand your testimony that the parenchymal changes can only be caused by an exposure to dust -- to some dust product?

THE WITNESS: If we're talking about the disease asbestosis, yes. Fibrotic lung conditions can happen due to a variety of reasons. There's over 150 causes.

THE COURT: Okay, but you're testimony today is related only to asbestos exposures. Correct?

THE WITNESS: Yes.

THE COURT: So your testimony with respect to the

Thoracic -- American Thoracic Society changes is specific to exposures to asbestos?

THE WITNESS: Yes.

THE COURT: Okay. Thank you.

BY MR. BERNICK:

Q And again, to be clear, so long as there is any reliable evidence on B read that there's any change whatsoever to the parenchyma, that would be -- that would support a diagnosis of asbestosis.

A That's correct.

Q Okay. Now, presumably, the diagnosing doctor would also have to be told if the individual has worked with asbestos.

A That's right.

MR. BERNICK: Okay.

THE COURT: Yes, that was my confusion, because I was slinking -- I was missing the link between the diagnostic change and I guess the work history.

MR. BERNICK: Yeah.

THE COURT: Okay.

BY MR. BERNICK:

Q And this is a very important point, so that -- you have a one slash zero, and there was a day -- in the earlier asbestosis one one smaller group. There?

A Yes.

Q We then have people who have one slash zero today, larger

group, and then we have people who have no -- have one slash zero but no asbestos exposure. They don't say that they're exposed to asbestos. Is your testimony that provided somebody -- a patient comes in and says I worked with asbestos, so long as they have this -- any evidence -- reliable evidence of any change to the parenchyma on examination of x-ray therein?

A Yes.

Q Now did Dr. Henry study people who had submitted x-rays in B reads in this case?

A Yes.

MR. FINCH: Objection. Relevance. May I state the basis of --

THE CLERK: You have to use a microphone.

MR. FINCH: Sure. May I state the basis of the relevance objection, Your Honor?

THE COURT: Yes, but before you go into this -- I'm sorry. My mind is still a little bit behind you folks, so before you get into this I'd still like to follow up with where I am. Is this a presumption, Doctor, that the one slash zero with the asbestos exposure is presumed to have asbestosis, or is it simply taken as a statement of fact that if you have one slash zero, you have asbestosis if you also had exposure to asbestos?

THE WITNESS: If you have one slash zero or above, profusion category in the presence of an exposure that the

physician thinks elevates the risk of developing asbestosis, then you've got the diagnosis.

THE COURT: So there is a value judgment by the physician that has to be added to this component.

THE WITNESS: Absolutely.

BY MR. BERNICK:

Q But is -- let me just -- and we're going to pursue that, Your Honor, in detail when we get to -- is what the Court just asked you about, Dr. Weill, an issue of differential diagnosis?

A Right.

Q Okay, so we have a one slash zero. Is it fair to say that the one slash zero could be due to asbestos but also could be due to something that's not asbestos.

A Yes.

Q And a doctor doing a differential diagnosis, finds the one slash zero, has to inquire about exposure.

A That's right.

Q Tell the Court whether or not there is variability in the quality -- in the quality of information that a doctor can get about exposure.

A There's a wide variety in the quality of the information. Some of the information comes from the patient himself, of course, and that can vary from patient to patient. Some of the information comes from the epidemiologic studies that address the exposures in a specific occupation, and that information

has to be considered strongly as well, because it gives you a background for what that patient might have been exposed to.

Q Okay. Do you -- does a doctor necessarily have enough information about exposure to compare that patient to the epi studies?

A No, often not.

Q Now, let's get back to -- we're going to talk -- are we talking a bit more about this as we get towards the end?

A Yes.

Q Okay, but when it comes -- and I think t his is the -- maybe I should've been clearer. When it comes to the radiograph itself, is the radiograph -- is the radiograph -- if it's one plus zero or greater, does the radiograph exclude anybody who's got any reliable evidence of changes in the parenchyma?

A No, it doesn't.

Q Okay, so might there be exclusion based upon exposure history?

A Yes.

Q Okay, but in terms of the radiograph itself, if you have evidence of any change there in the parenchyma from the point of view of that diagnostic tool, you're in?

A Yes.

MR. BERNICK: Okay. Is that -- I don't know if that --

THE COURT: Yes, that helps. Thank you.

THE WITNESS: It's a very objective piece of evidence.

MR. BERNICK: Right.

THE COURT: That helps. Thank you.

MR. BERNICK: Okay.

BY MR. BERNICK:

Q Now, let's talk about Dr. Henry's study. Did Dr. Henry's study look to see who within the group that he sampled had asbestosis by radiograph and who did not?

A Yes, he did.

MR. FINCH: Objection. Relevance. And I think this may be an appropriate time to either take a sidebar or excuse the witness. I think I can state the basis of the objection rather succinctly, but I don't want to influence the witness' testimony or to have any debate of this matter in the presence of the witness, so would --

MR. BERNICK: Well, whatever --

MR. FINCH: -- Your Honor --

MR. BERNICK: I don't care. I mean --

THE COURT: All right. Doctor, I'm going to ask you to take a very short five-minute recess, if you wouldn't mind, sir, please?

MR. BERNICK: This is on your time now. Right?

MR. FINCH: This is on my time, Mr. Bernick. Start

the stop watch right now.

THE COURT: Just a minute.

(Pause)

THE COURT: All right, Mr. Finch.

MR. FINCH: The ACC objects to the introduction into evidence of any or all of the questionnaires, proof of claim forms, x-ray materials, and any analysis or testimony based upon them on relevance grounds, and we have two substantive reasons. First --

THE COURT: Those in this case?

MR. FINCH: First --

THE COURT: You object to the proofs of claim and the PIQs in this case?

MR. FINCH: Your Honor, may I state the basis for the objection?

THE COURT: Yes, please.

MR. FINCH: First, under the settled law of this district, what is to be estimated here is the cost that Grace would incur over time to resolve its asbestos personal injury and death cases that are not resolved as of the petition -- the time the bankruptcy petition was filed and which would thereafter arise in the tort system going forward in the future. That estimation, pursuant to the same settled case law -- and by that I'm referring to Owens-Corning and Armstrong, Eagle Picher and Federal-Mogul -- is to be based on the cost

which Grace bore to resolve thousands of similar cases prior to the petition date subject to modification to reflect any obvious changes that have happened in the tort law -- in the tort system. If we are correct that this is the law, and if we are correct that this is the method by which the Court must estimate that liability, those costs, then the material in the files of the unsettled claimants, the people who were -- had claims that hadn't been settled as of the time Grace went into bankruptcy developed and maintained in their files after the petition date, has not relevance, since the evidence for the cost of the liability is found in Grace's history of tens of thousands of already resolved cases and not in the various materials in the process of development in the unsettled cases.

We have a second basis for our relevance objection. Even if, as the debtor argues, it is appropriate for the Court to consider the so-called, quote, legal liability of claims pending against Grace at the time the petition was filed, which have not yet been settled or resolved, the material that may have been collected from time to time in the files of the claimants in a period during which litigation and prosecution of their cases against Grace has been stayed is not relevant proof of what would be developed by way of evidence by the same claimants should their claims have actually proceeded to trial. Indeed, there will be evidence that will be -- witnesses who will testify to that very proposition.

The Court should be well aware that no court has set a trial date for the trial of any asbestos personal injury claim for either trial by allowance or trial by jury. The Court has never set a deadline to the -- require any personal injury claimant to identify the testifying experts they would rely on in trial, the industrial hygienists, the epidemiologists, the toxic tort experts, in a case involving Grace, nor could the Court do so under the estimation CMO, since the August 29th, 2005 order that Your Honor entered authorizing the estimation proceeding says it is a core proceeding. And I'll remind the Court that under 28 USC Section 157(b)(2) a core proceeding cannot be something that is the allowance or disallowance of individual claims for purposes of distribution.

Third, the questionnaire does not ask any personal injury claimant to identify the expert and fact witnesses that will testify in a trial involving their case, nor does it require the claimants to identify every document or piece of evidence that they would introduce into evidence in a trial involving Grace. Therefore, whatever was in their file when Grace served discovery on them, the interrogatories and the document requests which are part of the questionnaire, and that's what were produced in response to that, is what their file showed at a moment in time in the bankruptcy and is not evidence of what those very same claimants would prove in a

trial involving Grace. It would be as if that at the beginning of the case we had served document requests and interrogatories on W.R. Grace on April 2nd, 2001 and said produce what you have to prove your estimation case when they haven't hired all the experts they're going to be parading in front of you.

THE COURT: They wouldn't be proving an estimation case.

MR. FINCH: They are arguing about the methodology and the proof. Your Honor, the point is it's an objection based on lack of relevance for the grounds that I have stated, and we would like a ruling on this to protect the record.

THE COURT: It's overruled. The evidence is clearly relevant. With respect to the numbers of claims that the debtor will have to reconcile pre-petition going forward, there has been a bar date, and whether or not a claimant has satisfied the proof of claim information and the PIQ was ruled by this Court to be appropriate discovery in support of that proof of claim. That, in fact, substantiates the proofs of claim and the claims that, as of now, are the -- I'll call them in quotes, and I do mean in quotes. I'm not making a ruling -- the allowed claim base upon which the debtor has to reconcile what the present claims are and whether or not it will have a future claims base based upon the claims base that it now knows it has to face from its pre-petition past.

So in terms of numbers of claims, that is a relevant

universe. This proof of claims database is it --

MR. FINCH: But this --

THE COURT: -- and if the claimant didn't file a proof of claim against this estate, it's not going to be filed in one against the trust.

MR. FINCH: The -- but the -- there's a difference between filing a proof of claim --

THE COURT: Yes.

MR. FINCH: -- in the bankruptcy, but -- and what Grace is seeking to do here, which is to argue that the materials produced in discovery in response to the questionnaire tells you anything at all about Grace's legal liability for those individual cases.

THE COURT: I don't know what Grace is going to do yet. You're objecting to relevance to the question did Dr. Henry look to see who had asbestos or not. That's the objection to relevance. I don't even know who Dr. Henry is yet. There hasn't been any evidence as to who Dr. Henry is, so this whole objection on the basis of this record as to relevance at the moment, I have to overrule. I have no idea why this question as to whether Dr. Henry, whoever he is, on the basis of this record looked to see who had asbestosis or not isn't relevant.

MR. FINCH: May I have a continuing objection on relevance grounds to any analysis of the materials submitted

pursuant to the questionnaires?

THE COURT: No, we don't even have -- I don't even know what these documents are. They haven't been offered. I haven't --

MR. FINCH: Okay, then we'll --

THE COURT: -- had them identified.

MR. FINCH: Then we'll take them up on a document-by-document basis but --

THE COURT: We're going to have to until we get some offer as to what the documents are, then I'll incorporate this argument, Mr. Finch, and see where you want to go with it. But in terms of relevance as to the proof of claim -- proofs of claim in this case, they are highly relevant to set what the current base upon which Grace's number of claims will be estimated is.

Now, in terms of liability, we're not there yet. But numbers of claims, they are very relevant, and the personal injury questionnaire, that is discovery based upon those proofs of claim, that has to have some relevant data. Whether it will be relevant in the connection in which a particular question is offered, I don't know. I can only examine that in light of the evidence as it comes in.

MR. FINCH: Thank you, Your Honor.

MR. BERNICK: I do --

THE COURT: Why don't we all take a five-minute

recess, and then we'll --

MR. BERNICK: Yes, what I --

THE COURT: I'm sorry.

MR. BERNICK: -- thought I would do while we're still on the record -- I'm sorry, Your Honor -- is that I would really -- I think I know what Mr. Finch is doing, which is that he is making his record, and that's fine. He wants to make his record on his objection. I would like to not have this interfere with the witness continuing, so I would like to do is to put squarely what the Henry study is. That it is a study that, in fact, does relate to materials submitted in connection with the PIQs, so that Your Honor can, I'm presuming, rule then with respect to this witness' ability to testify about the Henry study. And if -- at least we'll be done with that, so that we don't have to go through this all as a hypothetical exercise. So as soon as he comes back, I will elicit that testimony, and then maybe if Mr. Finch wants to make an objection, he can make an objection, and we can go on.

I'm really concerned -- I mean this is all I think much more efficiently handled -- if he wants to make an objection, we don't need their whole brief all over again. He can simply say, well, you know, our position in this case is X, Y, Z, Your Honor can rule, and we can get on with business.

MR. FINCH: That's my intention, Your Honor. I think -- but I do have to protect the record, so that the District

Court or whatever court's ultimately going to review this --

THE COURT: We protect the record at the appropriate time not out of time, so that I can take it in the context. When you make a relevance objection, I need it relevant to something not to did Dr. Henry look to see whether or not there was asbestosis. Mr. Mullady.

MR. MULLADY: Yes, Your Honor, just in the spirt of Mr. Bernick's comment to keep the flow of the trial going and not to have a continuous discussion about this, the FCR joins the objection as stated by Mr. Finch on behalf of the ACC. When the Henry evidence is admitted, we will simply object on relevance grounds for the reasons Mr. Finch has articulated. I will not reiterate those reasons unless the Court wants me to.

THE COURT: Well, with respect to the ACC and the FCR, why don't I presume that if Mr. Mullady, you, or you, Mr. Finch, or whoever trial counsel is for a particular witness, makes an objection on behalf of either the ACC or the FCR, both of you join in that objection, unless you tell me to the contrary?

MR. MULLADY: That's fine, Your Honor.

THE COURT: Because your exhibits are joint, your witnesses for the most part are joint.

MR. FINCH: That's fine, Your Honor.

THE COURT: Is that agreeable to both sides?

MR. MULLADY: That's acceptable.

MR. FINCH: That's acceptable.

THE COURT: Fine. So I will assume that it is a joint objection from now on unless you tell me to the contrary. If you tell me to the contrary, then I will obviously not assume that it is a joint objection.

MR. FINCH: Thank you, Your Honor.

MR. MULLADY: Thank you, Your Honor.

THE COURT: Now, Mr. Bernick, let's go back. All right. The Henry study, tell me what your proffer is --

MR. BERNICK: Yes, the Henry study --

THE COURT: -- and let's do it by way of proffer.

MR. BERNICK: Yeah, the Henry -- that's fine. The Henry study is, in fact -- Dr. Henry will testify next. He took the x-rays that were submitted pursuant to the Court's order, and he extracted a sample of those x-rays. These are x-rays of people who have a claim for lung cancer. The world is lung cancer claimants.

In this case we took the x-rays that those folks provided. Dr. Henry took a sample of those x-rays and reviewed those x-rays to determine whether the ILO standards, that is how to have a reliable read -- and there's a standard that deals with that -- to see whether they were met. That is could you -- were these reads -- were these x-rays when read in compliance with the standards, which requires, you know, replicated readings, were they x-rays that properly showed a

rating of one slash zero or greater. So Dr. Henry took the recommendations of the ATS, applied them to this group, looked for reliable B reads that met the one slash zero applying the relevant ILO guidance on that question, and came up with the result that in only seven percent of the lung cancer cases was there a reliable that is replicable read of asbestosis defined as the minimal criteria of one slash zero.

That seven percent was then used by Dr. Florence, and it was used by Dr. Florence in two ways. He limited the estimate -- that is the claims that would clear that threshold -- to seven percent of the claims where those people -- where the people had submitted an x-ray. Where they had not submitted an x-ray, and they were supposed to -- that is they had stated that -- that they were relying on the x-ray, those were excluded. And where the claimant did not say that they were relying on the x-ray but didn't have anything else that they submitted by way of radiographic evidence, the same seven percent was applied to that group on the theory that, well, if they had submitted an x-ray, or maybe they had pathology, they had committed to being relying on x-rays. So as a buffer seven percent of those folks were allowed. So, essentially, the seven percent figure coming out of the Henry study was used in the estimation to draw a line between asbestosis claims that were properly supported by reliable radiographic evidence and ones that were not.

THE COURT: Okay. Now you're objection now, Mr. Finch.

MR. FINCH: With that proffer, I think the Court can consider my objection in a framework that it's tied not only to Dr. Henry but also to Tom Florence in the overall estimate.

My first objection -- the basis of the objection is relevance, and, as I said before, there are two grounds. Number one, we believe the controlling case law says you estimate based on the history of resolving cases in the past. It's clear that prior to the time that Grace went into bankruptcy it did not require lung cancer claimants to demonstrate a one slash zero x-ray to prove a case against Grace.

Secondly -- and that the settlement rules that Grace -- that Grace had placed as a cost in monetizing the claims it faced is the basis for what we think the Court has the ability to estimate here.

But, secondly, even under Grace's theory, the claimants have produced x-rays and other radiographic images, which Grace hasn't reviewed in the Henry study in response to the Court's order and Grace's discovery. That in no way means that those claimants, if their case went to trial, wouldn't, if they're still alive -- although, frankly, not a whole lot of them are alive -- wouldn't be able to go back and get another x-ray or a high resolution CAT scan, which is a lot more

sensitive for identifying asbestos stuff or pathology or having an expert come in and testify in their case that, in my opinion, you don't need to have radiologically diagnosable asbestosis in order to attribute the lung cancer to the asbestos exposure. That's a big debate in the medical literature. This -- Dr. Weill has one opinion on that score. There are many, many other reputable experts, epidemiologists, pathologists, the people who wrote the Helsinki criteria who have thousands of peer reviewed medical articles to their name, who have a very different opinion.

THE COURT: Well --

MR. FINCH: And so to the extent that Grace is using this study --

THE COURT: The problem with the x-ray submission is that several times during the course of this case I ordered that if there were going to be reliance on an x-ray study, that it be produced now, beuase at some point in the process the claimant -- the current claimant would have to produce an x-ray. And if it had to produce it to the trust, it could produce it now, and if it hasn't been done, then I said that the assumption for the purpose of this estimation trial would be that it did not exist if it has not been produced. I'm not going to back off that ruling now. That happened several times. The claimants have been given numerous opportunities to produce the evidence of their disease either by x-ray or by

something else, and if they have chosen -- if they have chosen to produce an x-ray, as they were given that opportunity, and have not done it, then at this point they simply do not have that option any longer.

MR. FINCH: But the order said for the estimation trial, which is an estimate of Grace's --

THE COURT: Yes.

MR. FINCH: -- aggregate liability to claimants not any individual --

THE COURT: Yes.

MR. FINCH: -- claimants. X-rays change over time. People get sicker. People die. People might get pathology when they didn't have pathology before.

THE COURT: Yes.

MR. FINCH: The point is, Your Honor, that by setting a deadline in March of what you had in your files at this time in a proceeding that everyone was told would (a) not result in the allowance or disallowance of their individual claims, and (b) was for the purpose of estimating Grace's aggregate liability, tells you nothing about the cases would be worth when, as, and if they were resolved by Grace or by a trust or in the tort system, and so we --

THE COURT: Well, certainly, it does, Mr. Finch, because to the extent that somebody is going to get more sick, they're either more sick now than they were when the case was

filed in 2001, and to the extent that they -- they're certainly not going to get less sick than they were in 2001. So, if anything, they would be more sick than they were in 2001.

MR. FINCH: And they may be more sick in 2008 --

THE COURT: They may.

MR. FINCH: -- or 2009 --

THE COURT: They may.

MR. FINCH: -- or 2010.

THE COURT: They may.

MR. FINCH: And that's why this -- that's the basis for our relevance objection. May I have a -- I think to protect the record under Evidence Rule 103, all I need to do is state the objection as to any testimony based on the questionnaire analysis the first time it comes up and maybe do it on a witness-by-witness basis. There's sort of two aspects of Dr. Weill's testimony. One is this stuff. The other is his PFT statement. Will the Court understand that when I stand up and object on relevance grounds to that, so I don't have to go through this entire spiel? That's what I'm trying to avoid, and I think Mr. Bernick has an interest --

THE COURT: Yes.

MR. FINCH: -- in trying to avoid that, too.

THE COURT: If --

MR. FINCH: As long as the record is clear that that's the basis for our objection.

THE COURT: First of all, with respect to the objection concerning the controlling case law on how to resolve claims, the purpose of this testimony is -- as I understand it, is -- at the moment with this witness is not how to resolve claims. This witness is not resolving claims. And so the testimony is not being proffered for that point, and, therefore, the relevance is not to that point. So as to this witness, the relevance objection is not relevant. So it's overruled. You may re-raise that objection when and if a different witness comes up and the proffer is to a different point. You are going to have to do it on a witness-by-witness basis.

MR. FINCH: Okay, on a witness-by-witness basis. So when Mr. -- Dr. Florence comes in and relates what this witness or Dr. Henry testified to the resolution of claims --

THE COURT: Yes.

MR. FINCH: -- that is again when we'll raise the relevance objection.

THE COURT: Yes.

MR. FINCH: But I do think we have to raise it on a witness-by-witness basis. This is the relevance objection to this witness, and I'll stand on that objection. I understand it's been overruled. Thank you, Your Honor.

MR. BERNICK: If you --

MR. MULLADY: One additional point of distinction for

the future claimants, Your Honor. To the extent that there is a relevancy objection here, that relevancy point is even one step further removed from the future claimants. The future claimants haven't submitted any x-ray films for review by Grace's experts, yet Dr. Florence's methodology assumes that future claimants in the future will be unable to demonstrate radiographic proof of asbestosis --

THE COURT: I understand, but this isn't --

MR. MULLADY: -- as an extrapolation from the current claimants.

THE COURT: -- Dr. Florence. This isn't the time for that.

MR. MULLADY: Understood.

THE COURT: Can we please get the objections with the witness who is on the stand at the time the witness is testifying? This is a different witness for a different purpose, and I'm not going to give you advanced rulings with a witness who's not on the stand. So let's get it in the context with the witness who's on the stand. If this is the purpose for trying to get these sidebars, folks, we're not going to do this anymore.

MR. MULLADY: That's not the purpose, Your Honor.

THE COURT: All right. Then let's limit it to the witness who's on the stand in the context of the witness' testimony. I'm not doing this any longer, folks. This is

ridiculous.

MR. BERNICK: Okay.

THE COURT: We'll take a five-minute recess. Mr. Bernick.

MR. BERNICK: No, I'm happy to adapt to the recess.

THE COURT: Do it now.

MR. BERNICK: I rather it be clear, so that Your Honor understands where we're going, and we get clarity. First of all, all the objections that go to, well, our experts would say X or Y or Z -- that all goes to the weight of the evidence. It doesn't go to whether it's relevant.

Secondly, we are making very spare use of the information that was received in connection with the proof of claim and PIQ process, so that we're working with underlying evidence that ain't going to change with time. Where the witness worked, he knows, and by and large the x-ray evidence, we're not even relying on the B reads. We're looking at the actual x-rays themselves. And, as Your Honor indicated, that's not subject to what experts go out and get. An x-ray is an x-ray.

So we're really using very extremely, you know, kind of bedrock hard information that we're getting out of the PIQ. To be clear to the Court, this witness' evidence is providing the foundation for the seven percent, what it is that it means. And based upon that, Dr. Florence will apply the seven percent.

Grace is saying that the people who have submitted the PIQs do not have in their x-rays a medical condition at the time of the x-ray that would lead to liability. It's not there. And because it's not there, the prospect of its ever being there -- you can never say never. But for purposes of this estimation, the only evidence in the record will be that these people did not have radiographic x-ray that supported a diagnosis of asbestosis.

And Your Honor has been fully consistent with this. They're saying, oh, well, maybe way down the road there will be more, but they're arguing that point in order to defend against our estimate. For purposes of this estimation, Your Honor has indicated (a) they had to provide it, period, but (b) for purposes of this estimation, that is the totality of the record. And so for them to argue that some day, some place the record might be different, and, therefore, this is not relevant, violates squarely the very words that they put in -- they suggested be in the order.

They're now saying, oh, we can now speculate that there would be more evidence, or we can say the evidence you have isn't any good, and that defeats the whole purpose of the order, which is if you've got evidence, folks, in support of your claim in these areas, you must submit it, otherwise, you are barred from making the argument. They're not making the argument.

So, yes, we will make -- we're proffering this testimony in support of the ultimate exclusion of these claims for the purposes of the estimate. Yes, it's totally consistent with Your Honor's order. Yes, it is relevant under the case law, and if they want to dispute whether a one slash zero really is necessary to diagnose asbestosis -- if they want to dispute that and say you don't even need that -- apart from pathology, you don't need anything but a history, that goes to the weight of the evidence. We don't think that's correct, but that goes to the weight of the evidence. So that's our -- that's the full extent of our proffer, Your Honor.

THE COURT: All right. We'll take a five-minute recess.

MR. BERNICK: Thank you, Your Honor.

(Recess)

THE COURT: I'm sorry. Please be seated.

MR. BERNICK: Is it okay to have Dr. Weill present?

THE COURT: Yes. Yes.

MR. BERNICK: Okay.

(Pause)

THE COURT: All right, Mr. Bernick. Dr. Weill.

MR. BERNICK: Thank you.

DIRECT EXAMINATION CONTINUED

BY MR. BERNICK:

Q Are you familiar with the work that Dr. Henry did?

A Yes.
Q Okay. Do you know what criteria Dr. Henry -- well, first of all, tell the Court what materials -- that is what x-rays Dr. Henry had reviewed during the course of his study.
A He examined x-rays that were submitted for a cancer claim.
Q In this case?
A Yes.
Q Okay. Now are you familiar with the criteria that Dr. Henry applied in the course of the study that he did?
A Yes.
Q Okay. I want to show you GG-2140, and had Dr. Henry took a sample? Is that correct?
A Yes, he did.
Q And he analyzed that sample to determine what?
A He analyzed the sample to determine the prevalence of radiographic asbestosis in the cancer claimants.
Q Okay. This chart reflects that he -- reflects a seven percent number over the asbestos box and a 93 percent number over asbestos exposure alone. Does that square with your understanding of the conclusion that Dr. Henry reached in his study?
A Yes, it does.
Q Now, Dr. Henry will be here to address the details of that study, but for purposes of our discussion here, in concluding that only seven percent of his sample had asbestosis, what

criteria -- precise criteria did Dr. Henry have used during the course of his study?

A Dr. Henry, as I understand it, used radiographic profusion category greater than one slash zero to determine if somebody had radiographic evidence of asbestosis.

Q Greater than one slash zero or greater than or equal to?

A Greater than or equal to.

Q Okay. What would then that say about the other 93 percent of Dr. Henry's sample? That is if only seven percent showed asbestosis, what would 93 percent -- what would you be able to say about the 93 percent?

A That they had no reliable evidence of parenchymal lung disease, in this case, asbestosis.

Q Say no reliable evidence. That is radiological evidence or all evidence?

A Radiologic evidence.

Q Okay. Let's be clear. So are you aware of any -- as you sit here today, based upon Dr. Henry's work, is there with respect to this group of claimants any reliable radiological evidence that their asbestos exposure, if they had asbestos exposure has had any actual impact on their lung tissue?

A No, there's no reliable evidence.

MR. FINCH: Objection. Relevance. Same --

THE COURT: Yes, overruled. You may answer, Doctor.

A No, there's no reliable evidence of that.

Q Okay. Now, apart from radiological evidence in the form of the x-rays, is there other potential radiological evidence that might be used? That is are there other radiological techniques that might be applied?
A There are other types of changes in the lung that might be attributable to asbestos exposure, namely, pleural changes.
Q Okay. Apart from pleural changes, which we're going to get to, is there any other technique other than an x-ray that would tell you whether there are radiological changes in the meat of the lung?
A No.
Q Okay. What about non-radiological evidence? Is there other non-radiological clinical evidence -- physical evidence that could tell you that there were changes in the meat of the lung?
A You would need pathologic specimens to do that.
Q Okay. Did Dr. Henry's study relate to pathologic evidence?
A No, not at all.
Q Okay. Let's now go forward and take up the question of other kinds of radiological evidence, and I want to direct you to pleural changes. Have you considered pleural changes in relation to lung cancer?
A Yes, I have.
Q Showing you GG-2142, we've got a slide here that is the

same slide that is showing the seven percent asbestosis evidence, the 93 percent where it's no reliable evidence of -- no reliable radiological evidence of lung changes, but then we have a little box marked out for pleural changes. Are pleural changes changes to the lung?

A No, they're the changes to the covering of the lung which is called the pleura.

Q Okay. Let's talk about those a little bit more specifically. I want to show you GG-2143. Does this slide help you explain to the Court the phenomenon known as diffuse pleural thickening?

A Yes.

Q Could you explain to the Court that phenomenon?

A Diffuse pleural thickening is one of the benign asbestos-related pleural diseases. And diffuse pleural thickening, as the name implies, is a very broad diffuse thickening of the visceral pleura that does not involve the lung parenchyma itself, and by definition, according to the most recent ILO classification scheme put in place in 2000, involves blunting of the costophrenic angle. And I can explain that in more detail, if you want.

Q Okay. First let's get our anatomy locations straightened out. You've talked about lung cancer and asbestosis as effecting the meat of the lung. Where we're talking about pleural -- diffuse pleural thickening, where are we in the

anatomy?
A So we're where the yellow box shows the arrows. We're in the covering part of the lung.
Q And that's called the what?
A Pleura.
Q Okay. Is that the same thing as the lung tissue, which is subject to lung cancer and asbestosis?
A No, it's distinct from that.
Q Okay. Is the condition known as visceral -- fibrosis of the visceral pleura, is that asbestosis?
A No, it's not.
Q Is that lung cancer?
A No, it's not.
Q Is that a disease of the lung?
A No, it's not.
Q Does it reflect an impact of asbestos on the lung?
A It reflects a change due to asbestos exposure. It's a marker --
Q On the lung?
A Not on the lung itself.
Q Okay. Now, let's talk about what the -- what that looks like on radiograph. Showing you GG-2144, does that help illustrate what is seen on x-ray where diffuse pleural thickening is present?
A Yes, it does.

Q Okay. Could you explain to the Court what it is that this shows?

A So on the left side of the panel again we have a normal chest radiograph, and on the right side of the slide what we see is that the left lung -- and remember it's reversed. The left is right, and right is left. The left lung shows blunting of the costophrenic angle and thickening of the pleura and would qualify that as diffuse pleural thickening. And it's shown as that white part that's outlined by the dashed red line.

Q Okay. What about pleural plaques?

A Yes, I did.

Q Showing you GG-2145, is this a demonstrative that would help you explain what pleural plaques are?

A It is.

Q Could you use demonstrative 2145 in explaining to the Court briefly what pleural plaques are and how they fit in here?

A Sure. Again, we're not talking about lung tissue here. What we're talking about is the covering of the lung. And opposed to diffuse pleural thickening, pleural plaques are a discreet thickening the pleura itself. So a focal circumscribed thickening of the lung pleura.

Q Did pleural plaques reflect a condition of the lung itself?

A No.
Q Did the pleural plaques reflect an impact of asbestos exposure on the condition of the lung itself?
A No.
Q Does pleural plaques, are they even a disease?
A No, they're markers of exposure.
Q Okay. Are they or are they not significantly associated with the loss of lung function?
A No, they're not.
Q Are they or are they not an independent risk factor for malignancy?
A They're not.
Q See radiograph 2146. Would that help explain -- does that help explain what a pleural plaques looks like?
A Sure. Again, normal left -- x-ray on the left side. Right side of the slide shows a chest radiograph where there's both right- and left-sided circumscribed pleural plaques, and as the dash line indicates, there is an on-face pleural plaque, meaning it's face on to the chest radiograph.
Q Okay. Turning to 2147, based upon consideration of pleural changes, did you reach any conclusion as to whether pleural changes constitute a risk factor for lung cancer?
A Yes, I did.
Q And what did you conclude?
A That they do not increase the risk factor.

Q Now considering also pleural changes with respect to the 93 percent of the sample that Dr. Henry looked at concerning these claimants, does it or does it not remain the case, in your view, that there is no reliable radiographic evidence of any impact on the lung itself of asbestos exposure with respect to that 93 percent?

A It does not affect it.

Q Are you aware of any reliable scientific evidence in the area of radiology that says that there would be such a change given the results of his study --

A No.

Q -- assuming his study is accurate?

A No, I'm not.

Q Okay. Now when the seven percent was applied -- are you familiar with this fact? That the seven percent number was then applied in the course of the estimation that was done -- the estimate calculation that was done by Dr. Florence?

A Yes, I am.

Q Okay. I want to show you -- well, first let me just ask you in the following way. We've talked about the fact that there may be people who have other kinds of evidence to support asbestosis, either pathology, slides, or are there other techniques that are involved like CT scans and the like?

A Yes, but not specific for asbestosis itself.

Q Okay. With respect to this seven percent, we have the

seven percent as applied to people who had x-rays submitted. With respect to people who did not have -- who had no x-rays but also know -- they didn't state that they relied on x-rays. That they actually pathology as an example or a CT. Would they have fallen in the category of no x-rays but not relied upon x-rays?

MR. FINCH: Objection. Lack of foundation. He's asking this witness to testify what Dr. Florence did.

MR. BERNICK: Well, I'll ask him to assume that that's exactly what Dr. Florence did.

Q I want you to assume, Dr. Weill, that Dr. Florence not only applied the seven percent to people who had submitted x-rays but also let pass through his filter people who did not have x-rays but had not said that they were relying on x-rays. I want you to assume that seven percent of those also were allowed in. If that approach had been taken, would that have provided room in the estimate for people who relied upon pathology or other techology?

MR. FINCH: Objection. Lack of foundation. This isn't -- he's offering -- he's asking him to opine on what people should be included or not included in the estimate not on what this witness did.

MR. BERNICK: Well, I'll put it more precisely.

Q Would it have been appropriate if we wanted to capture company -- Grace wanted to capture people who relied upon

pathology or other technology that is not x-rays and did not say that they're relying on x-rays -- would using seven percent across the board have been an appropriate way, from your point of view as a doctor, to let those people pass through the filter?

A Yes, I think it would --

MR. FINCH: Objection. Lack of foundation. Argumentative. He is asking this witness to opine on what people may or may not use to prove their claims, whether it's pathology or not. He's also asking this witness to basically walk through a hypothetical that he had nothing to do with.

MR. BERNICK: No, this doctor is being asked -- he is asked whether there are other technologies that are available. He said that there were. I'm now asking if we want to have people who do have evidence from pathology or from CTs -- if we want them still to qualify, whether it would be appropriate to have a -- them pass through in the same way as people who would've qualified with a radiograph. That's all that I'm asking.

MR. FINCH: Objection. Lack of expertise to answer that question.

THE COURT: I think that's the problem. I'm not certain where this witness' qualifications come in that estimation field.

MR. BERNICK: Okay. I'm not asking him to sign off

on the seven percent. I'm asking whether it would be appropriate if we wanted from a medical point of view to have people pass a medical screening if they had appropriate pathology evidence or an appropriate alternative technology like CT, would it have been appropriate to make provisions for them to pass through the screen if we wanted the screen to be medically sound.

THE COURT: Yes, but you're asking him specifically about the seven percent --

MR. BERNICK: Not -- forget --

THE COURT: -- and I think that's the issue.

MR. BERNICK: Forget the seven percent.

THE COURT: Then restate the question.

MR. BERNICK: Yeah, I'll restate the question.

BY MR. BERNICK:

Q Would it have been appropriate if we wanted to have the screen be medically sound to make room in the screen for people who had other evidence in the form of either (a) pathology or (b) an appropriate CT scan?

A Yes.

MR. BERNICK: That's my only real question, Your Honor.

(Pause)

Q If Dr. Florence's estimate incorporated the seven percent number from Dr. Henry's work and applied that to people who had

submitted x-rays, and if he also made a provision for people who had evidence through pathology or through CT, would that approach be consistent or inconsistent with your own view of what constitutes medically reliable evidence of asbestos relation for lung cancer?

MR. FINCH: Objection. Lack of expertise. Lack of foundation. Misstates what Dr. Florence actually did.

MR. BERNICK: Well, there -- first of all, there can be no expertise, because we qualified him to be expert in precisely this area. He's already testified for an hour in this area. All we're doing is creating a nexus between what he has testified to and what I'm asking him to assume is Dr. Florence's approach.

THE COURT: Well, you said if Dr. Florence incorporated the seven percent estimate from the x-rays --

MR. BERNICK: Right.

THE COURT: -- and also made provision for people who had evidence of pathology or CT scans but not necessarily the seven percent, as I understand, is that consistent with this witness' view of what's medically reliable evidence of lung cancer?

MR. BERNICK: What's medically reliable evidence of the link between --

THE COURT: Oh, the link.

MR. BERNICK: -- lung cancer and asbestos exposure.

THE COURT: I'm sorry. And what's the -- and the objection is that this witness isn't qualified to answer that question?

MR. FINCH: No, the objection is that it's -- it misstates what Dr. Florence did, and he has a lack of foundation to offer any opinions about whether what Dr. Florence did is medically appropriate.

MR. BERNICK: That is an entirely frivolous objection. Every day of the week you have testimony that's elicited from an expert on the assumption of another expert coming in and establishing something. That's exactly what I'm doing.

THE COURT: I -- that objection is overruled. I think this witness is qualified to offer that opinion.

BY MR. BERNICK:

Q Consistent or inconsistent?

A Consistent.

Q Thank you. Let's talk about other cancer. Have you looked to see whether there is -- hang on for half a second.

MR. BERNICK: I'm sorry, Your Honor.

(Pause)

MR. BERNICK: In the interest of time, I can move on to the last topic, Your Honor.

Q Let's talk a little bit about the diagnostic criteria for asbestosis. I think you testified previously, Dr. Weill, that

there are criteria, and they're set out as recommendations by the American Thoracic Society?

A Yes, I did.

Q Okay. I want to show you demonstrative GG-2151 and ask you whether these are the elements that are either recommended or recognized by the American Thoracic Society as important to a differential diagnosis of non-malignant disease from asbestos.

A This is a fair depiction of that.

Q Okay, so we have -- and again in the interest of time, those that are recommended by the ATS include exposure history and imaging, those that are recognized as having importance, or physical exam, medical history and lung function tests?

A yes.

Q And then based upon that, the doctor is supposed to conduct a differential diagnosis?

A That's right.

Q I want to ask you now for your opinion, whether in order to perform a reliable diagnosis of asbestos-related illness of the lung, whether compliance with the ATS recommendations is required or not.

A I think it is required.

Q Okay. Exposure history, what qualifies as an exposure history under the ATS recommendations?

A ATS recommends that a complete and thorough exposure

history is obtained.
Q Okay.
A It doesn't specify exactly how that's done, but it clearly states that it should be done.
Q I want to show you GG-2152 and ask whether this is an excerpt of the language that the ATS document uses in talking about the exposure history?
A It is.
Q Okay. That refers to, "It's to be obtained, whatever possible, directly from the patient that defines duration, intensity, time of onset, setting of exposure experienced by the patient. Occupational title is not enough as the names of many occupations and trades are uninformative." Is that what it says?
A Yes.
Q I want to come back to that one in a minute. Let me ask about lung function. Are there standardized methodologies for determining lung function?
A There are.
MR. BERNICK: And at this point, Your Honor, we would show the witness Exhibits GX-0322, 0323, and 0135, and they're in the binders, Your Honor.
Q And let me ask you, Dr. Weill, are those exhibits -- do they comprise the standards determining how pulmonary function testing should be performed?

A Yes.

MR. BERNICK: We offer them.

THE COURT: Any objection?

MR. FINCH: No objection, Your Honor.

THE COURT: They're admitted.

Q Dr. Weill, did you perform a study in connection with this case of pulmonary function results that were submitted by claimants in connection with the PIQ process?

A Yes, I did.

Q I want to show you Exhibit GG-2153. Does this demonstrative go through the stages of the analysis that you did?

A Yes, it does.

MR. FINCH: Objection. Relevance. I object to the relevance of any testimony or analysis of the pulmonary function tests submitted in response to the personal injury questionnaire for the two grounds I stated previously.

THE COURT: All right. Overruled.

Q Okay. In your own words could you just tell us basically what you did in order to perform your study regarding PFTs?

A Sure. Our first purpose was to determine the reliability of the sample of PFTs that were submitted by a variety of law firms in this bankruptcy matter.

Q Okay. Go ahead.

A As our methods, we determined or defined a random sample

of these PFTs in non-malignant claims only. We then developed a flow sheet that had as its basis a protocol to develop an assessment about whether or not patients were compliant with ATS criteria, and we reviewed each PFT to evaluate compliance in order to do this. And our results were, just to get to the conclusion, that none of the 150 PFTs that we analyzed met ATS requirements for the three standard lung function measurements.

Q I want to show you what we've marked as Exhibits GX-425, GX-426, and GX-427 and ask you whether these documents are summaries of the data that you obtained during the course of your lung function study.

A Yes, they are.

MR. BUCHBINDER: We offer them as summaries, Your Honor.

MR. FINCH: Objection. Relevance.

THE COURT: Overruled for the same reason. They'll be accepted only as summaries.

Q What did you find with respect to all the PFT studies or PFT measures that you reviewed during the course of your work from these different claimants?

A The none of the 150 PFTs met all three ATS criteria.

Q Is failure to -- does failure to meet the PFT criteria, does that bear upon the scientific reliability of the results?

A It does.

Q Tell us how it bears upon the scientific reliability of

the results?
A The performance of pulmonary function tests is highly technical, and in order for those tests to be repeatable and accurate, they must be performed properly, and to do that the ATS has developed these three documents that explain in a fair amount of detail about exactly how that should be done.
Q Okay. In your view, based on the results of your work, were any of the PFTs that you reviewed -- did any of them constitute reliable medical evidence?
A No.
Q Do you have illustrations of two of the problems -- some of the problems that were identified during the course of the PFT studies?
A I do.
Q Showing you Exhibit 2154 and 2155 -- well, actually, let's go through 2154 and 2155. What is reflected on 2154 as an illustrative?
A And again these are just examples. And so what this example shows is the failure on spirometric analysis to meet ATS criteria, and what the failure is is that during the patient's effort -- during the spirometric effort, which in this case is inspiratory and expiratory, the patient coughed, and so it disrupts the measurement while the patient's coughing.
Q Okay.

A And so to accept that spirogram is to accept information that is not valid.

Q If somebody wanted to, could they just redo the test?

A Sure.

Q Okay. Showing you 2166, what's the problem illustrated on 2155?

A So again this is -- as part of the spirometric evaluation you do what is called the volume over time measurement where time is on one axis, in this case the horizontal axis, and the volume a patient expires is on the vertical access. And what the ATS criteria designate is that there should be three efforts of at least six second duration when a patient blows out and a plateau should be reached of at least one second. Failure to meet that is a failure to meet one of the spirometric requirements that the ATS puts forth.

Q I want to show you Exhibits GX -- I apologize for the length of the number here. Your Honor it is GX7.1681352. And the second one is GX7.893695. So the first one was 1681352, second one is 8939695. Can I show you these and particularly the flagged pages that I've identified here? Are these the PIQ submissions for the two individuals whose PFTs you used for illustrative purposes and Exhibits 2155, GG-2155 and GG-2154?

A Yes, they are.

MR. BERNICK: We offer them, Your Honor.

MR. FINCH: Objection, relevance.

THE COURT: Overruled.

Q Why don't we come back to differential diagnosis, if we can show 2156 and I want to come back to the discussion that we had a few moments ago with the Court about the significance of exposure history? In differential diagnosis, could you tell us what it is that the doctor in general terms does in differential diagnosis?

A What a physician is doing when generating a differential diagnosis is considering all possible causes of whatever objective evidence the patient presents.

Q Okay.

A And then, I'm sorry, just to expand a little bit on that. Then there's a process that goes through the physician's mind where he or she is excluding and ruling in possibilities constantly.

Q Okay, now you have here on 2156 that when it comes to differential diagnosis we are talking conditions that are asbestos related, you say other conditions mimic the radiographic appearances of asbestosis and plural abnormalities and other diseases cause restrictive impairment. What are you getting at when you make reference to those points? What's the relevance of that?

A So even from an imaging and physiologic, that's the pulmonary function test standpoint, there are diseases that look exactly like the asbestos related diseases. And so if we

were to go back to the x-rays that I flashed up earlier looking at these asbestos related changes, one couldn't necessarily determine that those were asbestos related. If you took those changes just in isolation.

Q So showing you GG-2157, is this a list of some of the conditions that as you say mimic the radiographic appearances of asbestosis?

A Yes.

Q We see a whole variety of them there?

A Yes.

Q Turning to 2158, is this a similar list with respect to conditions that mimic the radiographic appearance of diffused plural thickening?

A Yes, it is.

Q And with respect to 2159, same thing with respect to plural plaques?

A Yes.

Q Would it or would it not be fair, Dr. Weil, to say that in all cases that is with respect to asbestosis, plural plaques and diffused plural thickening that there are a wide variety of other non-asbestos related conditions that can cause radiographs that could be confused or similar to the radiographs that are associated with those asbestos related conditions?

A That's a fair statement.

Q Okay. Now you've told us before that when it comes to differential diagnosis, one of the tools that you have at your disposal to determine whether a condition of the lung is asbestos related or not, that is it might be one of these other things, is to look for an exposure history. Do you recall that?

A Yes.

Q And again in order to bring us up to where we are in this examination I think you also told us that the quality of the exposure information obtained on patient history can be variable.

A That's right.

Q I want to show you GG-2160 and ask whether this would assist you in describing what some of the different kinds of exposure information can comprise?

A Yes. On the left side of the slide, I've labeled what is called anecdotal information. And that information comes from the patient himself and it varies from patient to patient. Some patients give a very detailed information, others don't. But it varies. Now that information has to be compared to the epidemiologic evidence that is available about exposure that's much more carefully performed.

That evidence is usually occupation specific and quantitative in nature. And so it provides a level of evidence that is very good. And from a physician's standpoint it

provides a background or framework to think about that individual patient's exposure.

Q Okay. Now let's focus on this for just a moment. If you have -- if you, as a doctor, have only anecdotal information and it's general. I saw some dust in the air, et cetera, et cetera, does that mean that a differential diagnosis is just impossible?

A It's very difficult under those circumstances.

Q Depending upon the level of detail associated with the anecdotal information might still become at some point, based on anecdotal information alone, to perform some kind of differential diagnosis?

A Yes. You just have to do the best you could.

Q I now want you to assume for purposes of my question that the information that is obtained from the patient is of sufficient specificity, that is as you showed in your prior slide under the ATS, you know, intensity, duration, et cetera, such that it can be matched up with the epidemiological studies. I want you to make that assumption. What does that do to the differential diagnosis?

A Well it raises your level of evidence about the exposure history and makes the evidence more firm that you have an adequate exposure history to increase the risk of developing asbestosis.

Q Okay. Now I then want to ask you whether -- in a sense,

the question I want to get you to is you know does it -- if you've got the exposure data from the claimant that is here is where I worked and how long I worked and you can fit it into the epidemiological science, is there any way that a differential diagnosis by an individual doctor somehow traps the learning of epidemiology?

A No, it doesn't.

Q And why is that?

A Because the epidemiology has been done on a larger group of patients. It's usually been done, if done properly, in a quantitative dose fashion and so that the level of evidence and the information you have about exposure is more precise.

MR. BERNICK: I pass the witness, Your Honor.

THE WITNESS: Your Honor, would it be possible to --

THE COURT: Certainly. We'll take a ten minute recess. I'm going to correct a note here that I need to correct so please take your recess.

(Recess)

THE COURT: Everyone back? Okay, Mr. Finch. Doctor, are you ready? Okay. Mr. Finch.

MR. FINCH: Thank you, Your Honor.

CROSS EXAMINATION

BY MR. FINCH:

Q Good morning, Dr. Weil. My name is Nathan Finch. I am counsel to the asbestos claimant's committee in the Grace

Bankruptcy.
A Good morning.
Q Is it true that you only have one publication related to asbestos?
A Yes.
Q And that was a letter to the editor in response to the 2004 American Thoracic Society statement on the diagnosis and initial management of asbestos related non-malignant diseases?
A That's right.
Q That was not a peer reviewed publication, correct?
A It was reviewed by their editorial board.
Q But it was not a statement -- it was not a study of asbestos related diseases, correct? It was a commentary on the 2004 ATS standards, right?
A That's right.
Q And you've never participated in any research regarding asbestos, correct?
A That's also correct.
Q And when you have testified in occupational lung cases it's been most commonly for defendants, correct?
A That's correct.
Q And somewhere between 20 to 25 percent of your income in the past two years has been from matters in which you've been working for W.R. Grace?
A That's correct also.

Q Now I have heard your testimony about differential diagnosis and the importance of taking individual case histories. Would you agree that the question of whether or not a particular exposure to an asbestos containing material has played a role in an individual's development of an asbestos related disease depends on the careful analysis of all the facts and circumstances relating to that particular individual?
A Yes.
Q That's true for every asbestos disease?
MR. BERNICK: Your Honor, I don't know who the individual is over here but unless that was -- maybe it was --
THE COURT: For my --
MR. BERNICK: Oh, it's to you. I apologize. Just saw a thumbs up and was wondering what was going on.
MR. FINCH: Let the record reflect there was no attempt to give a thumbs up to the witness. It is a technological issue as to which I'm probably incompetent to handle myself.
THE COURT: But for my edification, could you repeat the last question please? While that was going on, I too was a bit distracted.
Q Sure. Okay, Dr. Weil, would you agree that the question of whether or not a particular exposure to an asbestos containing material played a role in an individual's development of an asbestos related disease depends on a careful

analysis of all the facts and circumstances relating to that particular individual?

A Yes.

Q That's true for every asbestos disease?

A Yes.

Q That's true for the each exposure?

A Yes.

Q And that's true for each individual's medical situation?

A That's also true.

Q Now the letter to the ATS you referred to in response to one of my earlier questions, you were co-author of that letter with a Dr. Hans Weill, correct?

A That's right.

Q And Mr. Bernick on direct exam elicited that you are Dr. Hans Weill's son, correct?

A That's right.

Q And you were relying on some of his research for your opinions here, correct?

A I am.

Q Is it fair to say that you and he are in general agreement on issues relating to asbestos related medicine?

A As long as you make that specification, yes.

Q So you would agree with him that may asbestos disease patients are exposed to asbestos from a variety of sources?

MR. BERNICK: Objection. If there's going to be

purported impeachment of the witness using testimony from his father, that'd be a very interesting kind of impeachment. But I think that the fact that he agrees with his father's view or Dr. Weill, Sr.'s views does not provide an adequate foundation for then attempting to impeach him using Dr. Weill Sr.'s testimony.

MR. FINCH: I wasn't trying to impeach him, Your Honor. I was asking him does he agree that many asbestos disease patients are exposed to asbestos from a variety of sources.

MR. BERNICK: The problem is that is now counsel's testimony that that is Dr. Weill Sr.'s view and there is no foundation for that. If he wants to provide a copy and give the witness an opportunity to review it, he can then-- there can then be a record of the fact that Dr. Weill Sr. said that on examination. Otherwise, all this is is reading from some other person's statement and saying do you agree with Dr. Weill. There's no record of evidence that Dr. Weill said that.

MR. FINCH: Okay, may I approach the witness, Your Honor?

THE COURT: Yes.

Q Let me ask the question this way. Dr. Weill, leaving your father completely out of it, would you agree that many asbestos disease patients are exposed to asbestos from a variety of sources?

A I think some are and some aren't.
Q But many are, correct?
A I'm not really sure what you mean by many. I think just some are and some aren't.
Q Would you agree that it's not possible to do an epidemiological forecast just as the people who were exposed to one particular company's asbestos product?

MR. BERNICK: Objection. Lack of foundation. Also goes beyond the scope of his examination. He's now trying to turn this witness into an epidemiologist with respect to a different question that this witness never addressed. I'm sorry, this is an improper question. This goes outside the scope of the examination. It attempts to turn this witness into an expert on epidemiology concerning Grace specific exposure. He was never proffered for that purpose. It goes beyond the scope of direct and seeks to make him now the ACC's witness. This is totally improper.

THE COURT: I don't think the witness is qualified on epidemiology or forecasting. He was qualified with respect to certain issues concerning asbestos and lung diseases and I'm not sure how this fits into that, Mr. Finch. Do you want to lay a foundation for me?

MR. FINCH: Your Honor, he did testify about his use of epidemiological studies.

THE COURT: He did.

MR. FINCH: In making a differential diagnosis.
Q And would you agree with me, Dr. Weill, that the epidemiological studies that you looked to in making a differential diagnosis do not in general provide the names of the products to which the people were exposed?
A It does provide the type of exposure they had. Sometimes product specific, sometimes not.
Q Can you point to any source in the epidemiological literature that lists the names of the products to which the workers were exposed? The Selikoff studies don't name all the products that were exposed --
MR. BERNICK: That's two questions, which question?
Q Okay. You would agree with me that the Selikoff insulator studies don't list the names of the products, correct?
A They don't.
Q And the Hans Weill and Hughes study of the cement workers in New Orleans doesn't list all of the names of all of the various asbestos products those people were exposed to, correct?
A That's also correct.
Q And as you sit here today, isn't it the case that the vast majority of the epidemiological literature doesn't name the products? They might name the types of products, but they don't name the products which the workers were exposed to?
MR. BERNICK: I think this is outside scope. Let him

answer it and move on.

A By naming the product, you mean company name?

Q Yes.

A No, they do not.

Q And so would you agree with me for that reason it's not possible to do a product specific epidemiological assessment or projection of disease?

MR. BERNICK: That question is no different than the question he asked five minutes ago and has the same defect. He is now making this witness into an expert in epidemiology and seeking to elicit testimony in support of a proposition that was not placed at issue on the direct examination.

MR. FINCH: Your Honor, I stand by my question. Can I have a ruling?

THE COURT: Well this witness -- this is well outside the scope of this witness's testimony and I'm not sure, unless there is something in his report that I don't recall reading, Mr. Finch, so it may be there and I may have forgotten it. I don't recall that this witness offered an opinion on this type of area.

MR. FINCH: Okay. I'll move on, Your Honor. Thank you.

Q You have -- I believe I placed a copy of your first report on the ledge in front of you. Do you have that?

A Yes.

Q Dr. Weill. And for purposes of identification we've marked this as ACC-597. I don't intend to offer it Your Honor, but I do have some questions for the witness from it. Do you have your first report, ACC-597 in front of you, Dr. Weill?

A Yes.

Q Okay, could you turn to Page 19 of that report?

A Got it.

Q Okay. At the last paragraph, is it correct that you wrote while there is widespread agreement about the role of cigarette smoking and causing lung cancer, the relationship between asbestos exposures, asbestosis and lung cancer has been intensely debated both in the academic and legal arenas. The opinions regarding this relationship can be divided into three positions. One exposure to asbestos of any amount increases the lung cancer risk; two, exposure to asbestos of amounts sufficient to cause asbestosis are necessary to attribute lung cancer to exposure and three, asbestosis either rated graphically evident or president on histologic material is necessary to attribute lung cancer to asbestos exposure in an individual case. You wrote those words?

A Yes.

Q And so that's the debate in the medical literature, correct?

A Yes.

Q Could we go to the powerpoints? All right, one of the --

while we're waiting for that, one of the articles you cited in your report, and I believe it's Reference 84 in your report, is an article by Gustovson, correct?

A Yes.

Q Okay, now at Page 23 of your report, if you turn to Page 23 of your report, Dr. Weill?

A Yes.

Q You write, some studies have indicated there is a dose response relationship between asbestos exposure and lung cancer risk, even at low levels of exposure. And that's reference 84, right?

A Right.

Q That's the Gustovson study?

A right.

Q Okay. Could you turn in your notebook to Exhibit 331?

A I've got it.

Q All right. Exhibit 331 is the article by Per Gustovson that you cited for the proposition that some experts believe that there is a dose response relationship between asbestos exposure and lung cancer risk even at low levels of exposure?

A Yes.

Q And that was an article that was published in the American Journal of Epidemiology?

A Yes.

Q That's a peer reviewed medical journal?

A It is.
Q And what those researchers found in the middle of the abstract is that lung cancer risk increased almost linearly with cumulative dose of asbestos. The risk at a cumulative dose of four fiber years is 1.90, 95 percent confidence, interval 1.32 to 2.74. That's what they found, correct?
A Yes.
Q Now there is, if we go to the powerpoint, okay, so there is lung cancer caused by asbestos three views. One is what I'll call the Gustovson view that lung cancer plus asbestos exposure. Second view is -- you are familiar with the Helsinki criteria. You talked about them a little bit on direct, correct?
A Yes.
Q Those criteria were developed by a group of approximately 20 scientists who have expertise in asbestos related medical issues, correct?
A Yes.
Q One of them was Dr. John Parker?
A That's right.
Q He's one of Grace's experts here?
A As I understand it.
Q One of them is Dr. Victor Rodley who is one of the FCR's experts here?
A Yes.

Q And the authors of the Helsinki criteria had collectively between them published hundreds of papers in the peer view medical literature on asbestos related diseases, correct?

A That's correct.

Q In your book on Page 398 there is the summary title from the -- excuse me, Exhibit 398. Are you at Exhibit 398 Dr. Weill?

A Yes.

Q John, can we get back to Exhibit 398? That's the summary page and the summary article from what is commonly known as the Helsinki criteria, correct?

A Yes.

Q Okay. And could you turn to Page 314 of that article? And the authors of the Helsinki criteria concluded, did they not, that relative risk is roughly doubled for cohorts exposed to asbestos fibers at a cumulative exposure of 25 fiber years and with an equivalent occupational history at which level asbestosis may or may not be present or detectable? Heavy exposure in the absence of radiologically diagnosed asbestosis is sufficient to increase the risk of lung cancer. Cumulative exposures below 25 fiber years are also associated with an increased risk of lung cancer but to a less extent. That's the opinions of the authors of the Helsinki criteria, correct?

A That's correct.

Q Back to the slide show. Now the third point of view is

the view that your father had and that you have which is that in order to attribute lung cancer to asbestos exposure, you have to have lung cancer and asbestosis, correct?

A Yes.

Q So if you have a patient with lung cancer and asbestosis, you would attribute their lung cancer in whole or in part to asbestos exposure?

A That's right.

Q Okay. Now One way you confirm the presence of asbestosis or can, and this is the way your father did it in the Hughes Weill's study was by looking at x-rays of people, correct?

A That's right.

Q Another way to confirm the presence of asbestosis is to confirm it by pathology correct?

A Also correct.

THE COURT: Again, this is saying asbestos but you mean asbestosis, correct?

MR. FINCH: I mean asbestosis. There's a typo in Number 3, Your Honor. I apologize for that.

THE COURT: Okay.

MR. FINCH: I'm not going to offer these. These are for demonstrative purposes.

Q With that, you understood my question Dr. Weill? The two ways to confirm the presence of asbestosis. One is you can confirm the presence of asbestosis by looking at an x-ray,

correct?
A Correct.
Q And the second way is to do it by pathology, correct?
A That's correct.
Q Now on direct examination Mr. Bernick showed you a list of some studies. One of them is something called the Kipen study. Are you familiar with that?
A Yes.
Q All right. Would you agree with me that the Kipen study stands for the proposition that asbestosis can be present pathologically even if an x-ray is completely normal?
A Yes, I'd say that.
Q And if you go to your book, Exhibit 623 in your book?
A I've got it.
Q Okay Exhibit 623, ACC FCR 623, that's what is commonly known as the Kipen study that was published in the British Journal of Industrial Medicine?
A Yes.
Q And what those authors found in the abstract and what they found in their study is that these were 138 people where they had a tissue specimen that people have died from lung cancer, right?
A Yes.
Q And all of them had parenchymal fibrosis determined pathologically even though 18 percent of that group had no

radiologic -- they had no radiographic evidence of parenchymal fibrosis, right?

A That's right.

Q Okay. Can you go back to the powerpoint?

THE COURT: I'm sorry, would you say that again please.

Q What that means Dr. Weill is that --

THE COURT: No could you just restate the statement for me. I thought you said they died of it but they had no evidence of it. Is that what you said?

MR. FINCH: NO, they died of lung cancer.

Q That's correct, Dr. Weill?

A They did.

Q And they had pathology specimens on 138 of those people, that's right?

A Also right.

Q Okay. And for all 138 of those people when you looked at the pathology -- pathology involves taking a specimen of tissue and putting it under a microscope, right?

A Right.

Q When they looked at the pathology, all 138 of those people had asbestosis, right?

A Yes.

Q Would you agree with me that if asbestosis is detected by pathology, it's there? There's no dispute whether it's

asbestosis or not?
A There might be a pathological dispute but not as a clinician, a dispute with me.
Q If you heard -- have you used the statement that pathology is the gold standard for diagnosis asbestosis?
A Certainly heard that, yes.
Q Okay, and so what this found is that in 18 percent of those people they had normal chest x-rays but they in fact had asbestosis?
A Right.
Q Now back to the powerpoint. So I believe you just said pathology is the gold standard?
A Yes.
Q Okay. I want you to assume that a person has lung cancer and asbestosis that is confirmed by pathology but is not detectable on an x-ray. Make that assumption?
A I can.
Q You would attribute that person's lung cancer to the asbestos exposure at least in whole or in part, correct?
A That's correct.
Q To say that lung cancer in this person could not be caused by exposure to asbestos is medically wrong, isn't that right?
A That's right.
Q Now what is the American Thoracic Society? We talked about the document which was shown to you by Mr. Bernick which

is Grace Exhibit 274. What is the American Thoracic Society?
A It's a society of primarily chest physicians.
Q And the publish statements about such things as what criteria are necessary to run an appropriate lung function test for example?
A That's right.
Q And you relied on those in doing your analysis for PFTs?
A Right.
Q And they also published statements about what diagnostic criteria are necessary to diagnose asbestosis and other non-malignant diseases, correct?
A Yes.
Q The -- could you turn in your book to ACC FCR 389.
A I've got it.
Q That's the same -- Your Honor, for the purposes of the record that's the same document as Grace 274.
THE COURT: All right.
Q This is the American Thoracic Society statement regarding the diagnosis and initial management of non-malignant diseases related to asbestos, is that correct?
A Yes.
Q Okay. The -- back to the powerpoint. Would you agree with me that the American Thoracic Society statement allows for a diagnosis of asbestosis to be made with a 1/0 on the ILO scale, correct?

A In the proper exposure setting.
Q In the proper exposure setting. Adequate asbestos exposure, correct?
A Yes.
Q Appropriate latency?
A Yes.
Q And latency is usually stated as more than 10 years, correct?
A Some state it more than 10 years, some say more than 20.
Q Okay. And the latency period for asbestosis can be 40 or 50 years in some cases, correct?
A That's also correct.
Q And then you exclude other causes, right?
A Yes.
Q Could you turn in the -- leave the powerpoint up, we'll just go through the books. Could you turn in your book to Exhibit 389, the ATS statement to Page 696?
A I've got it.
Q Now one way to look for interstitial fibrosis in the meat of the lung, as you put it, is to look at an x-ray, correct?
A That's right.
Q Another way to do it is to look at high resolution CT scans, correct?
A That's correct.
Q HRCT. And would you agree with me that the American

Thoracic Society is determined that HRCT is much more sensitive in detection of asbestosis than plain chest radiographs?

A That's what they concluded.

Q Okay. So what that means is that if you look at an HRCT scan you are much more likely to see the changes, the interstitial changes that can be asbestosis than if you just look at an old x-ray, right?

A I don't agree with that. I think what you are more likely to see are changes and I would stop there.

Q Okay, so you disagree with the ATS about that?

A I disagree and I don't think that they were trying to imply that the HRCT scanning is absolutely specific for asbestosis. I agree with their statement regarding its sensitivity. It's a very sensitive clinical and refurbished tool.

Q Don't they also say at the top of Page 697 that HRCT is more specific than plain chest radiographs excluding conditions such as emphysema, thistle prominence, overlapping plural disease, bronchiostasis which may confound radiographic interpretation?

A I agree with their statement that it's more specific when excluding those diseases. What I don't agree with is that it is more specific in excluding other fibrodic lung disease.

Q So you differ with them on that, correct?

A No, I don't. I actually agree with that statement. But

those diseases that they list are not fibrodic lung diseases. Those are diseases that look entirely different on HRCT scanning. So where I differ is that HRCT scanning as a tool is unable to distinguish between the over 150 causes of fibrodic lung disease.

Q And you differ with the American Thoracic Study on that particular aspect?

A I don't. What they are saying is that it is very specific -- a very specific tool when you are talking about differentiating between obstructive lung diseases that they list here for instance and changes due to asbestosis, which are very fibrodic lung disease.

Q But would you agree with me that the American Thoracic Society allows clinicians to use HRCT to diagnose asbestosis?

A What I think the discussion really included in the statement is that HRCT scanning is a very sensitive tool for looking at lung disease. That's what I took away from it.

Q Okay, and -- but it is permissible to use an HRCT to diagnose asbestosis, correct?

MR. BERNICK: Wait. Permissible or consistent with the guidelines that are before the witness?

Q Would you agree with me that it's consistent with the guidelines for a clinician to use HRCT to diagnose asbestosis?

A It's in the guidelines.

Q So it is consistent?

A Yes.
Q Would you also agree that the American Thoracic Society does not require lung function impairment to diagnose asbestosis?
A That's correct.
Q Would you agree that the American Thoracic Society does not require more than one B reader to read an x-ray to diagnose asbestosis?
MR. BERNICK: Objection to the form of the question. That assumes that the ATS standard addresses the issue.
Q Do you agree with me that there is nothing in the ATS standard that says you need more than one B reader to read an x-ray to diagnose asbestosis?
A I don't remember their weighing in on that subject one way or the other.
Q And I believe you agree that the proposition that the American Thoracic Society allows doctors to use HRCT to detect asbestosis?
THE COURT: I'm sorry, would you repeat that?
Q Would you agree with me that the American Thoracic Society allows doctors to use HRCT to detect asbestosis?
A Sure.
Q Okay. Now, let's talk briefly about --
THE COURT: I'm sorry, Mr. Finch. May I ask a question about the HRCT please? Doctor, you just said that the

HRCT is a specific disease that helps you diagnose obstructive lung diseases, but that's not what asbestosis is.

THE WITNESS: Right.

MR. FINCH: So I'm sorry, did you have a specific question you wanted me to --

THE COURT: Yes, So the ATS allows you to use that function to diagnose a disease for which it is not intended to be used?

THE WITNESS: I'm sorry I didn't make that clear. What I was really trying to point out is that the -- there is two broad categories of lung disease both obstructive and restrictive. The HRCT being a very sensitive tool, meaning it's trying to include everybody that has possible lung disease fulfills that criteria. It's very sensitive. What -- while it allows us to distinguish between different categories of the disease, ones who are within one category of disease, i.e. fibrosis in our discussion, it breaks down. It's not able to give us enough specificity to allow us to distinguish between asbestosis and the other causes of fibrosis.

THE COURT: So it's not specific within the categories once you get to a category, restrictive versus obstructive.

THE WITNESS: That's correct.

THE COURT: Okay, thank you.

Q But it does allow clinicians to use HRCT to diagnosis

asbestosis, correct?
A I think it suggests it as an aid in that process, yes.
Q Okay. Were you aware that in Dr. Henry's study they ignored any HRCT images that came in with the sample of x-rays?
A I can't speak specifically to how they handled HRCT scanning in that study.
Q Let's talk about the health effects of asbestosis. One of the things that was found in your father's study of the cement workers is that people who had asbestosis were four times more likely to die of lung cancer than people who did not, is that correct?
A That's correct.
Q So that's one consequence if you are diagnosed with asbestosis, you are four times more likely to die of -- to get lung cancer, correct?
A Yes.
Q And most people who get lung cancer eventually die of it, right?
A That's right.
Q Would you also agree with me that asbestosis is a chronic condition? There is no way to cure it.
A That is also correct.
Q Do you also agree with me that if you have asbestosis, you are more susceptible to respiratory infections?
A I'm not aware of any studies that look at asbestosis

specifically although it's true of any chronic lung condition.
Q So any kind of chronic interstitial fibrosis can make you more susceptible to lung -- to infections?
A I would agree with that.
Q Okay. Would you agree that asbestosis causes a lung function decline in some people?
A Yes.
Q Would you agree with me that most people who get asbestosis don't die from it?
MR. BERNICK: Your Honor, I object to this line of questioning. I don't know what it has to do with the witness's direct examination.
THE COURT: He's an expert in -- he's been qualified as an expert in this area. I think this is clear that it's cross examination. It's overruled.
A I'm sorry. Could you repeat the question?
Q Would you agree that most people who contract asbestosis don't die from it?
A It depends. It really depends on the severity of the disease. So I can't give you a percentage in the broad category of asbestosis how many die and how many don't.
Q Would you agree that a person can have asbestosis without knowing it?
A Yes.
Q And on the pulmonary function test scores, one of those

measurements is force vital capacity?
A Right.
Q And that is expressed as a percentage of predicted value?
A That's also right.
Q So in order for someone to show up as abnormal on a pulmonary function test for force vital capacity, FVC, you have to be below 80 percent of predicted is one way they calculate that, correct?
A That's one way.
Q Another way to calculate it is below the lower limits of normal meaning two standard deviations from the mean, correct?
A Also correct.
Q Okay. And so --

MR. BERNICK: Your Honor, again this witness offered testimony about how to perform the pulmonary lung function test period. He was not offered for purposes of getting into any other aspects of lung function and how to deal with it. Now it may be that we could have him testify about that but that's not -- his nickel is part of his case, not my case.

THE COURT: But it's still cross examination and he's still an expert in this area.

MR. BERNICK: Sure, but what he can't go to cross examination -- it can't be cross examination and go to his credibility or use for impeachment unless he has said something in his direct that is contradictory. And he didn't address

this in direct.

THE COURT: Well he hasn't address this specifically in his direct. I'll give you a little leeway Mr. Finch, but you are going pretty far afield on this testimony.

MR. FINCH: I have two more questions about this topic and then I'll move to one other topic and that'll be it.

Q Would you agree with me in the measuring of lung function decline, let's say a person starts out at 110 percent of predicted. Okay, let's say that they are a world class runner. And their lung function declines from that to 85 percent of predicted on forced vital capacity. Understand that hypothetical?

A I do.

Q That person is still going to show up as normal on a lung function test?

MR. BERNICK: Objection. This is the same -- this is a hypothetical that has no tie to anything in particular. Again if he wants to do this he can do this as part of his case, not this case.

THE COURT: That's sustained.

MR. FINCH: All right, Your Honor. One other thing.

Q In terms of the American Thoracic Society Mr. Bernick asked you about the 1986 American Thoracic Society statement. Do you recall some questions about that?

A I do.

Q Could you turn in your book to an exhibit that's been marked ACC FCR 621?
A I've got it.
Q This was previously marked as Grace 280, Your Honor. This is the 1986 American Thoracic Society Statement?
A Yes, it is.
Q Could you turn on the elmo quickly? Do you remember Mr. Bernick showing you this list of -- zoom it out. Right there. Do you remember Mr. Bernick showed this list of conditions that mimic the radiographic appearance of asbestosis?
A Yes, I do.
Q Could you turn in the American Thoracic Society 1986 guidelines on Page 367?
A I've got it.
Q The last paragraph above the summary. It's Exhibit 621.
A Yes.
Q The last paragraph above the summary the American Thoracic Society writes there are diseases unrelated to asbestos exposure but with similar symptoms. These may occur in some persons with asbestos exposure. However, given a clear history of exposure to asbestos, a diffuse interstitial fibrosis can be assumed to be due to the asbestos as other forms of interstitial fibrosis are relatively uncommon. Is that the ATS's views?
A Yes.

Q And they haven't changed that view?
A I don't think so, no.
MR. FITCH: Your Honor, I pass the witness. Thank you, Dr. Weill.
THE WITNESS: Thank you.
THE COURT: Mr. Mullady.
MR. MULLADY: Thank you, Your Honor.

CROSS EXAMINATION

BY MR. MULLADY:
Q Good afternoon, Dr. Weill.
A Good afternoon.
Q Is the elmo still up? Thank you very much. On direct examination, you discussed the Hughes Weill study on asbestos as a precursor of asbestos related lung cancer. Is that correct?
A Yes.
Q We're showing the article on the elmo at this time, correct?
A Yes.
THE COURT: I'm sorry. What's the exhibit Mr. Mullady?
MR. MULLADY: This is GX-590.
THE COURT: Thank you.
Q And you told us, Doctor, that this article provides a biologically plausible hypothesis linking lung fibrosis and

cancer as common mediators, correct?
A Actually this article provided epidemiologic evidence. Not so much biologic plausibility.
Q Understood.
MR. BERNICK: If you could get a little close to the mic, it would be easier for us to hear.
A Sorry, I was mentioning that this article and my testimony about it provided epidemiologic evidence regarding the attribution question not so much the biologic plausibility issue.
Q Understood. You showed us this slide illustrating your hypothesis, GX-2130. Do you recall this?
A Yes.
Q And the theory is essentially that asbestos is a lung carcinogen because of its ability to cause lung fibrosis, right?
A Yes, in part, yes.
Q And that theory is actually discussed in the Hughes Weill article toward the end of the paper. Do you recall that?
A Yes.
Q The study authors had this to say about the theory. The current study is the latest in emerging body of evidence supporting the view that asbestos is a lung carcinogen because of its ability to cause lung fibrosis. Nevertheless, further results and support of these findings is necessary before a

firm conclusion concerning such a mechanism can be reached. Did I read that correctly?

A You did.

Q So it's only a hypothesis. Further study is needed, correct?

MR. BERNICK: Objection. What is a hypothesis? Objection to the form of the question. I'm not sure everybody understands or not. What is the reference about what is the hypothesis?

Q I'm referring, Doctor, to the hypothesis that is discussed in the article as opposed to your biologically plausible hypothesis.

MR. BERNICK: Again, I would then object. He's directed the witness to a particular paragraph dealing with a particular feature that is being discussed in that article, not the article as a whole. If the reference is to the what is discussed in that paragraph, I understand the question.

THE COURT: Restate the question, Mr. Mullady, specific as to what the hypothesis is you are referring to please.

Q Doctor, let's just take a step back. You would agree that the study authors here characterize their work as the latest in an emerging body of evidence supporting the view that asbestos is a lung carcinogen because of its ability to cause lung fibrosis?

A I don't think the -- I don't think the authors were suggesting a biologic explanation for their findings.
Q That wasn't my question.
A I'm not sure what it is then.
Q I'm simply asking you if the Hughes Weill authors stated in their paper that their study which they refer to as the current study was at that time the latest in an emerging body of evidence supporting the view that asbestos is a lung carcinogen because of its ability to cause lung fibrosis?
A Yes.
Q And they go on to say nevertheless further results in support of these findings are necessary before a firm conclusion concerning such a mechanism can be reached, correct?
A That's what they conclude.
Q Right. So the mechanism that they are hypothesizing in this article, you would agree that they were saying that that is a hypothesis and that further study is needed to confirm it?
A That's what they are saying, but remember this is over 15 years ago that this article was published. So there's been more recent work on the molecular aspects of this question.
Q But it is still fair to say, isn't it Doctor, that to date the medical and scientific community has not reached a firm conclusion concerning the hypothesized mechanism?
A The hypothesized mechanism?
Q Correct.

A I think what can be said is that since 1991 there's been additional evidence and additional research that's proved informative. Now to say that it is completely worked out and perfectly understood would be an overstatement.

Q You testified that it's your opinion that you can't have asbestos related lung cancer in the absence of asbestosis, correct? We talked about that?

A Yes.

Q In other words, you believed asbestos exposure alone does not cause lung cancer, correct?

A Yes.

Q But asbestos exposure alone can certainly cause asbestosis. You don't disagree with that?

A No, I do not.

Q And asbestosis can cause lung cancer, correct?

A Yes.

Q And putting on the elmo here a slide that you used in your direct. This is 2130, GX-2130.

THE COURT: I think it's 2139.

MR. MULLADY: Oh, I'm sorry.

Q 2139, 39. And here you are indicating that as between asbestosis and lung cancer there is a direct connection and you put the word yes here for that reason, correct?

A Yes.

Q But we could also draw an arrow from asbestosis exposure

alone to asbestos -- excuse me, I'll restart this question again. We could also draw a line from asbestos exposure alone to asbestosis and we could put yes next to that as well, couldn't we?

A You could put yes. But you would also have to have a pathway of course that says no. Because not everybody that is asbestos exposed is going to develop asbestosis.

Q But with that caveat you would be comfortable making that connection and using the word yes?

A In that very narrow sense, yes.

Q I want to ask you some questions about your testimony on the taking of an exposure history. I think you told us in your report that the proper taking of a careful exposure history is vital when diagnosing an asbestos related condition, correct?

A Yes.

Q Can we have 597 please? I'm having your expert report pulled up from October of 2006 where you discussed the history that a clinician should take from a person presenting with a possible asbestos related disease. Do you recall that in your report?

A Yes.

Q Okay, we have it on the screen. At Page 52, excuse me, yes 52 we can go there under exposure history. You told us that the history should not simply contain job titles and the company name of where one worked but rather comprehensive

information about the chronology of workplace exposures, frequency of exposures, type of respiratory protection used and proximity to others using asbestos products in the work environment, correct?

A That's correct.

Q Can we have 407 please? This is the W.R. Grace asbestos personal injury questionnaire that was given to claimants in this case, Doctor. I just want to refer you to Part 3 on Page 9 of this form which is where the claimants were asked to provide evidence of their direct exposure to Grace asbestos containing products. It's a little bit small. I hope you can read it.

A I'm sorry, where am I looking?

Q Top of this Page 9, Part 3, direct exposure to Grace containing asbestos -- Grace asbestos containing products. Do you see that?

A Yes.

Q And we see here that the Grace claimants were asked to provide information in the nature of exposure column on the far right of the chart and we're going to blow this up a little bit so you can see it. It's a little dark but I think you can make out the words nature of exposure. Do you see that?

A I do.

Q They were asked, if we can go back up to the top on the instructions, they were asked to indicate the letters

corresponding to whether the claimant was in “any of the following” during his exposure and the choices are listed in Paragraphs A through E. Do you see that?

A Yes.

Q Now --

MR. BERNICK: Your Honor, this does go beyond the scope of the direct examination and all I can say is the door is now open to the witness testifying about the -- about what actually happened in filling out these forms. I’m happy to do that but this goes beyond the scope. I feel obliged to say this goes beyond the scope of direct examination and opens the door to another area of inquiry that I intend to pursue.

MR. MULLADY: I think Mr. Bernick is a little bit ahead of himself. I think when he sees what I’m doing with this he might not have this concern.

THE COURT: All right.

Q Directing your attention to Paragraph, I think that’s E, a worker in a space -- a worker in a space where Grace asbestos containing products were being installed, mixed, removed, or cut by others. Do you see that?

A Yes.

Q Now Doctor, given that one of the elements of an appropriate history, exposure history, in your view is to determine whether the worker was in, as you say, proximity to others using asbestos products in the work environment. Does

knowing that the worker was in a space where asbestos products were being used, without more, give you a basis as a clinician to conclude that the worker has an asbestos related disease?

MR. BERNICK: Objection. Is that the sole piece of information in the hypothetical, just that?

MR. MULLADY: Yes.

A As I understand, you are asking if I would consider that information as part of the whole?

Q No. I'm saying that if that's all you knew that the worker worked in a space where Grace asbestos products were being used by others, as a clinician would that be enough of an appropriate exposure history to determine whether that worker has an asbestos related disease?

A It really depends on the exposure. I don't think I can make a generic comment about that.

Q But would you agree that as a clinician trying to determine if this individual, this hypothetical individual, has an asbestos related disease you would want to know about the size of the space or just how closely the patient worked to asbestos? Wouldn't you?

MR. BERNICK: Objection to the form of the question and lacks foundation.

THE COURT: Overruled.

Q I think you answered it. Can you repeat your answer?

A I think that would be helpful information.

Q You agree that clinicians should quantitate -- qualitatively figure out if the patient you are talking to has enough exposure to increase the risk of disease because it's impossible to accurately quantify the individual's exposure. Is that correct?

MR. BERNICK: That question is compound number one. Number two, the second part of it exceeds at least based upon the proffer so far, the scope of his expertise.

THE COURT: Let me see if I got this correct because if I did, I have to sustain this objection. Do you want to restate the question?

MR. MULLADY: I'll withdraw the question and just refer the witness to his deposition testimony.

THE COURT: Okay.

Q Do you recall giving deposition in this case, Doctor?

A Yes, I do recall it.

MR. BERNICK: Your Honor, the fact that he's given a deposition is relevant if it's impeachment, the impeachment of a statement. What's the statement that's being impeached.

THE COURT: That's sustained too.

Q Do you agree, Doctor, that a clinician assessing whether a patient has an asbestos related condition should qualitatively determine if the patient has had enough exposure to asbestos to increase the risk of disease?

A To the extent that you are unable to do it quantitatively,

the answer is yes.
Q And often as a clinician you are unable to quantify the amount of asbestos and you must make that qualitative judgment, is that correct?
A In an individual case, that is true.
Q You showed us a demonstrative, this is 2160, if we can have the elmo back up please. This demonstrative discussed the components and methodology for generating a reliable diagnosis. Do you recall this?
A Yes.
Q And this is where you put into two categories different types of exposure evidence. Some anecdotal and those which would fall under the rubric of epidemiologic evidence, correct?
A Yes.
Q My question is with reference to the question on the PIQ about whether the worker is or was in a space, would it be fair to say that would be another type of anecdotal information that would go over here? I was in a space. Would you agree with that?
A I would certainly agree with that. What I'm unsure of is that is the only information you have because I'm not familiar with what studies are available regarding Grace exposure quantitatively in a space.
Q With that qualification, what I've written there that's the appropriate place for it. It's in the anecdotal category.

MR. BERNICK: Objection. First of all that doesn't even properly quote Category E. B, it takes it out of context of the other questions that were asked with respect to it. So to the extent that that question purports to refer to the questionnaire, it is misleading and it is incomplete.

THE COURT: Well the question proffered to the witness was not incomplete but the statement that was just added to the chart does not reflect what was on the PIQ. So to the extent that you want something added to the chart that is reflective of the PIQ right now I'll understand that to be the shorthand explanation of what is on the PIQ. But you are going to have to write out what was on the PIQ. If that is what you are attempting to do. The witness has said it's anecdotal except he doesn't know whether there are any quantitative studies to back up the data. So I think the record is clear.

MR. MULLADY: I don't think I need to rewrite it but let me just ask the witness.

Q You would consider it to be anecdotal if the worker said I was in a space where Grace asbestos containing products were being installed, mixed, removed or cut by others?

MR. BERNICK: And that is the only information that was provided?

MR. MULLADY: Correct.

A If that's the only thing a patient says, it's anecdotal.

Q Thank you.

MR. MULLADY: That's all I have for the witness. Thank you, Your Honor.

THE COURT: All right. Mr. Bernick, are you going to have redirect?

MR. BERNICK: I will.

THE COURT: How long?

MR. BERNICK: Probably around 15, 20 minutes max.

THE COURT: Why don't you do it and then we'll take a lunch break?

MR. BERNICK: If I could ask it's just going to take time to get things together. I know it will go more quickly if we take a lunch break.

THE COURT: All right. We'll recess until 1:30

MR. BERNICK: Is there anybody else that has --

MR. FINCH: Your Honor, does the rule on witnesses apply in Delaware? I would ask that the witness not be allowed to consult.

THE COURT: Oh yes, Doctor, you are not allowed to consult with counsel concerning your testimony during the lunch recess. All right. We'll be in recess until 1:30.

(Lunch Break)

THE COURT: You are still under oath, Dr. Weill. Mr. Bernick.

REDIRECT EXAMINATION

BY MR. BERNICK:

Q If we could show TJ -- 2125. If we took a look at this fundamental slide that posed the issue that you framed for us, Dr. Weill, which is does asbestos exposure alone without asbestosis cause lung cancer. I want to deal with a couple of the studies that were discussed with you on cross examination to see how it is that they fit in. In fact what I might do is if I could switch over to the elmo a second and use a hard copy of the same document. So the question -- it should be on. Is there any reason why it's not? No it looks to be on but I don't get anything here. Nothing like rebooting. Rebooting solves all the problems in the world, right.

So where -- the two questions that you posed or the question that you posed was is asbestos exposure alone tied to lung cancer or must their be asbestosis or put differently, without asbestosis that is with asbestos exposure alone do you get lung cancer? Is that a correct statement of the question?

A That's correct.

Q Now you talked about two basic studies. There was the Selikoff study or the insulators. Where do I put the insulators if I want to ask the question what did the insulators tell me about?

A So on this slide, this would be Category 1 that there is only asbestos exposure alone.

Q For the insulators?

A For the insulators.

Q But then what about when you get to the insulators as updated by the Kipen work?
A If you then follow the Kipen work and get pathologic information as in Kipen you see that the asbestotics were at higher risk in that cohort for lung cancer.
Q Now once you know that from Kipen, where does the cohort belong? Does this cohort tell us about what happens for lung cancer with asbestos alone? Asbestos exposure alone or is this a cohort that tells us about workers who have asbestosis as well?
A Once you have Kipen it's asbestosis.
Q So we put the insulators over here. But through the insulators can you find out about asbestos exposure alone? That is now with the benefit of Kipen, is there any way to go back to the insulators and figure out if asbestos alone is enough to get you there?
A No. There's no way to figure that out.
Q Now let's talk about the Hughes Weill study. Where does the Hughes Weill study fit in?
A That would be in the category that shows an arrow between asbestosis and lung cancer.
Q Okay. And this is now the asbestos cement workers?
A Yes.
Q Okay. Does that same study though also give us information about asbestos exposure alone, that is without

asbestosis?
A It does.
Q And on the basis of the asbestos cement workers, is that what then leads you to answer the question here yes and the question that is asbestos alone no?
A Correct.
Q Now I want to ask you about a different study that was put to you on cross examination which is the Per Gustovson study. Are you familiar generally with this study?
A Yes.
Q And I've got a copy here in case you need to make reference to it. But in this study is there anywhere in this study that there is sufficient specificity in the data to enable us to answer the question of whether asbestosis is tied to lung cancer?
A No.
MR. FINCH: Objection leading.
Q You tell me if that study belongs number 2, number 1 or actually someplace else.
A No, it belongs in number 1. It's an asbestos expose cohort and that's the information you have in that study.
Q On the basis of that study though can you tell whether it's asbestos exposure alone or whether there is also asbestosis?
A No.

MR. FINCH: Objection, leading.

Q Now if we have -- if this is a situation where there is high asbestos exposure or just say asbestos exposure. In that case it's low. Asbestos exposure and asbestosis, both at the same time, but all that's being reported is the asbestos exposure. First of all, is that what's going on in that study?

MR. FINCH: Objection. Leading.

THE COURT: It is leading Mr. Bernick. You are going to have to --

MR. BERNICK: Well I'm just trying -- it's really foundational to another question.

Q I'll put it to you very simply. Tell us whether or not you can find out from that study whether or not the people in that study also had asbestosis?

A There's no information in that study on that point.

Q On the basis of that study, is it possible to test or to answer with specificity the question that you have posed here?

A No.

Q Is that study unique that way or is that also true of other studies?

A Also true of other studies.

Q Now Mr. Mullady made a little diagram. He said --

MR. MULLADY: Objection to little.

Q Okay, we'll blow it up real big. GC-2140 and he said well isn't it true that where you have asbestos exposure you have a

risk of asbestos? And you do this one here and you say well yeah, there are a certain number of people who have asbestos exposure, get asbestosis and a certain number of people with asbestosis on your theory get lung cancer. You said that's true.

Now does this idea that is because you can't get asbestosis without asbestos and because with asbestos you may get lung cancer, does that tell you the answer to the question at all about whether asbestos exposure alone and the absence of asbestosis contributes to or has associated with it a risk of lung cancer?

A No.

Q Tell us why not?

A Because remember as I pointed out in the response to that question there is another arrow that has to lead off into the no category. In other words those that were asbestos exposed but did not develop asbestosis. So there is a yes and a no leading from asbestos exposure alone.

Q Therefore in order to answer this question, this direct that is what about the people who have asbestos exposure as a group, do they have an increased risk of lung cancer, that is asbestos alone --

MR. FINCH: Objection leading.

MR. MULLADY: I didn't ask the question yet.

Q I said in order to answer the question, tell us what you

have to do?
A Without the presence or the absence of asbestosis and information on that you are not able to say.
Q Now turning back to 2142 I want to tee up this question. If we go back to the period of time when asbestosis the criteria for asbestosis were narrower in the group of people called true asbestotics were narrower, a narrower group of people. Was there or was there not in fact controversy based upon science as to whether having that asbestosis, that stricter asbestosis, was a prerequisite for getting lung cancer due to asbestos?
A There was some controversy on that point.
Q Now that the definition of asbestosis has been expanded to include as you've indicated anyone who demonstrates actual physical evidence of any impact on the lung per se, with that broad definition, tell me whether there is significant science that says only thing that is clear is a history of exposure. No objective evidence of impact on the lung and there is still a risk of lung cancer. Tell me is there a large body of sciences out there that says that?
MR. FINCH: Objection. Leading, compound.
THE COURT: It is Mr. Bernick.
Q In your own words, I want to frame the issue. Now that we're solely taking the people who cannot qualify for asbestos because they have no objective measurements of any effect on

the lung for asbestos. Focusing on those people, tell me in your own words the state of whether there is lots of science, little science that actually links those kinds of people to lung cancer.

MR. FINCH: Objection. Compound and leading.

MR. BERNICK: No.

THE COURT: It's not leading and it's not compound enough. This witness can answer the question.

A I think the reliable scientific evidence demonstrates that without the presence of asbestosis you cannot attribute lung cancer to asbestos exposure. So on the question of just the asbestos exposed patients without information either pathologic or radiographic, you can't say. You just can't determine whether or not you have an asbestos contributable lung cancer.

Q Okay. Are you aware of any kind of consensus statement that says no, there really is science that robustly demonstrates that relationship? Have you heard of any such consensus statement?

MR. FINCH: Objection, leading.

A No.

THE COURT: No, it's are you aware. That's not leading.

Q Has any such study been pointed out to you here today?

A No.

Q Let's talk about HRCT. HRCT I think you talked about as

being, and Mr. Finch I believe read to you some portions of the 2004 ATS statement with regard to the diagnosis of non-malignant disease. In the greater sensitivity, I would like to see in fact if I can dig that out at some point. But tell me whether the -- today there is anything either an ATS recommendation or some other document that sets out the grading to follow in using an HRCT that runs parallel to the grading that you have for x-rays into the ILO?

A No, that's never been done.

Q Is that -- I just want to direct your attention -- turning to GX-0274 in evidence. I want to direct your attention to this language where it says a proposal zoom -- a proposal has been put forward for a classification system analogous to that of the ILO system for plain chest radiograms. But none has been widely adopted. Do you see that statement there in the more current ATS statement?

A Yes, I do.

Q Absence such a grading system, is there a way to use HRCT to do the kind of epidemiological study that was done of the cement workers?

A No, not in my opinion.

Q What about pathology? Is pathology something that was available to be used to do the kind of epidemiological analysis that was done of the asbestos cement workers?

A No, it wasn't available.

Q Based upon the currently available technology of the fact that there is now currently available technology for HRCT but with no classification system or pathology, does that in any way diminish the significance or reliability of the findings that were made in the asbestos cement study?

A No.

Q I want you to assume that there was a more sensitive technique that was available to do the work that was done in the asbestos cement study. You know, more sensitive, could pick up asbestos more readily and you could classify it and do everything that you wanted to rate. And that the result of that was that more asbestosis was found in that study than was picked up by the x-ray reads. Would that necessarily -- would that have had any necessary effect one way or another on the outcome of that study?

MR. FINCH: Objection. Leading.

A It likely would have had an effect --

MR. BERNICK: Well wait.

Q Would it have had an effect one way or another --

THE COURT: No, overruled.

A It likely would have had an effect but not in a predictable way.

Q And what do you mean by that?

A Well, anytime you employ a more sensitive test to include more people in the possibility of having disease, you're going

to change the dynamics of the study. So when doing that you can't really predict how the study is going to come out. You've changed diagnostic tools, particularly one that's much more sensitive, as in the case of HRCT, and you'll likely change results in some unpredictable way.

Q Well, but differently. If radiograms, or reading x-rays, is less precise, does that fact give a bias one way or another in the outcome of the Asbestos Networker study?

A No.

Q If -- for Dr. Henry's study he looked at the x-rays and weather -- which of the x-rays were found to comply with the standards and which not. In aid of that issue, would pathology -- using pathology had fit into his study?

A No.

Q Mr. Mullady asked you a bunch of questions about this particular language that appears as part of GX0590, which was not in evidence but was referred to. He said, "Do you see where it says, 'The current study is the latest in the emerging body of evidence supporting the view that asbestosis is a long carcinogen because of its ability to cause lung fibrosis; nevertheless, further results in support of these findings are necessary before a firm conclusion concerning such a mechanism can be found?'" Do you remember being asked a whole bunch of questions about that?

A Yes, I do.

Q Does that statement in some fashion diminish the analysis of data that was set forth in this study?
A No. As I mentioned, this study speaks to the epidemiology regarding causation. The mechanism, or the biologic factors taking place, is an entirely different question.
Q I also want to go on and say -- do you see where he goes on to say, "Finally, these data may provide further evidence to support the common practice of attributing lung cancer to exposure to asbestos only if asbestosis is also present. Otherwise, these tumors are, in most instances, due to cigarette smoking." Do you see that statement?
A Yes.
Q Where you have asbestos exposure alone, no asbestosis -- I'm now pointing to G12140 -- and you have smoking, so asbestos exposure alone and smoking and a case of lung cancer, tell me, you know, just how -- tell me the significance of the presence of smoking as an explanation for the lung cancer?
A It would be very significant.
Q How strong is that risk factor?
A Cigarette smoke is a very strong carcinogen, and even with say a 20 pack year cigarette smoking history, which would be considered I think a moderate smoking history, the risk of developing lung cancer is 20 fold versus those who don't smoke. So it's a very strong carcinogen.
Q You were asked a question about whether the ATS statement

made any requirement about having multiple B-reads. Do you recall that?

A Yes, I do.

Q Is there or is there not an independent requirement that bears upon that question?

A I'm not sure I understand the question.

Q Is there a separate standard, a separate and independent standard, that bears upon that question?

A Yes, the NIOSH.

Q And was that the basis of your testimony on direct?

A Yes.

Q Okay. Finally, with regard to the questions that were asked of you regarding exposure, I believe that Mr. Mullady elicited testimony from you that when it comes to doing a diagnosis, a careful analysis of all the facts that bear upon the individual who's being diagnosed, that a careful analysis is appropriate, and you agreed with him. Do you recall that?

A Yes.

Q Okay. Once you've done that careful analysis, that's once the data is all there, does all of the data that may be gathered carry equal weight?

A Not necessarily, no.

Q We showed -- or you showed the Court Exhibit 2160. What relevance, if any, did this document have in talking about once you've got the individual data what weight to give to different

parts of it?
A Well, I think what the epidemiologic studies allow us to do is develop a framework to evaluate the individual patient, and so the epidemiologic studies are important to develop that framework when used in combination with the anecdotal information.
Q Okay. And is all of the -- I mean -- I think Your Honor probably already understands well where this is going, so I'll skip over it, and it's probably somewhat unnecessary to get into this as well, but relating -- pertaining to Exhibit ACC/FCR407, which was the questionnaire -- remember that Mr. Mullady wanted to ask you a bunch of questions about it. I just want you to focus on this whole page. Only assume that this question is being asked, and he asks you, "Well, essentially is that kind of limited information?" And you agreed with him that it was. I now want you to look at the rest of page where you have all these other categories, and then for each job description you've got different job descriptions, products, basis for identification, dates and frequencies of exposure, occupation codes, industry codes, and then a further column that's marked there relating to the kind of exposure. I ask you the same question. Is this or is this not the kind of information that you would want to have in reaching an assessment about how important the exposure was?
A It is the kind of information you'd want.

Q I now further want you to assume that there's industrial hygiene data that on the basis of these answers enables an industrial hygienist to specify what the exposures are so that you can compare them to the epidemiological studies. With the benefit of all of that information, what relevance is that -- what relevance, if any, does that have to performing a proper differential diagnosis?

A It's very relevant.

MR. MULLADY: Objection, Your Honor. Objection. I think we're now outside the scope of the cross. I didn't ask him about industrial hygiene --

MR. BERNICK: Well, that's the whole point, is that you excluded that from the question.

THE COURT: It seems to me that this is fair with respect to the issue of what the impact of the anecdotal data compared to the epidemiological studies and the comparison of the two, which seems to be the thrust of both the direct and the redirect, so -- or the cross, pardon me -- so I'm going to let a little leeway, but --

MR. BERNICK: It's the last --

THE COURT: -- not too far, Mr. Bernick.

MR. BERNICK: Yes. Because I understand that Your Honor probably well gets the drift of this. I just want to make sure that the record is clear.

Q Where all of that is present, that is you have -- you have

the ability to know what the person did, what their jobs are and the industrial hygiene data that is associated with that, at that point is it satisfactory to simply aim for a qualitative assessment, or do you want to aim for more?

A You want to aim higher.

Q Okay. And if you can aim higher, what impact does that have on the ability to conduct a meaningful differential diagnosis, if any?

A It just raises your certainty about the type of asbestos exposure the worker got.

MR. BERNICK: I have nothing further, Your Honor.

MR. FINCH: Brief recross, Your Honor?

THE COURT: Yes, sir.

RECROSS EXAMINATION

BY MR. FINCH:

Q Dr. Weill, do you still have the book that I gave you up there?

A Yeah.

Q Okay. Could you turn to the Hughes-Weill study?

A Could you give me the number again?

Q It's Exhibit Number 628.

A I've got it.

Q And in that study the dividing point for asbestosis was 1/0, correct?

A That’s right.

Q So even though the ATS standard hadn't changed from 1/1 to 1/0, your father considered 1/0 sufficient to be asbestosis, correct?
A Yes.
Q All right. The Gustavsson study, that's Exhibit 331, Mr. Bernick asked you some questions about that study on direct. Do you recall that?
A Yes.
Q Could you turn to Page Ten Twenty of that study? It is Exhibit Number ACC-331.
MR. FINCH: It's not in evidence, Your Honor. I just used it with him on cross examination --
THE COURT: Okay.
MR. FINCH: -- and Mr. Bernick had some questions about this on redirect.
THE COURT: Yes, sir.
Q Do you have Page Ten Twenty in front of you --
A Yes.
Q -- Dr. Weill?
A Yes.
Q And that shows estimates of exposure for these various people --
A Yes.
Q -- in the top column and the relative risk for nonsmokers and then -- compared to various people who smoke?

A Yes.
Q See that?
A I do.
Q And what this shows is that for people with fiber exposures of between 1 and 2.49 fiber years, their relative risk -- even if they were never smokers, their relative risk of getting lung cancer was 2.7, correct?
MR. BERNICK: I object. Your question assumes that there was even more than one person who fit that category.
THE WITNESS: I think --
MR. BERNICK: Do you know that that's so?
A That's certainly what the table shows, and I can comment further, though, regarding the confidence interval.
Q The current smokers, or people who were exposed to asbestos at greater than two and a half fiber years, shows 40 times the risk of -- excuse me -- confidence intervals of 4.6 to 40 as compared to 6.7 and 16.6 for unexposed people?
A You're going to have to try again.
Q Yes, sure. In the current smokers, you've got people who smoked from one to ten cigarettes a day. People who were never exposed to asbestos, the relative risk of dying is 10.5. For people who smoked greater than two and a half -- excuse me -- people who had more than two and a half fiber years of exposure, the relative risk was 13.5, right?
A I see that.

Q Okay. Would you agree with me that all of the exposures shown on here, zero to .99, one to 2.49 and 2.5 are levels of exposure unlikely to result in asbestosis?

MR. BERNICK: Well, number one, the question is falsely framed because it's not 2.5 --

MR. FINCH: Your Honor, it's -- this is --

MR. BERNICK: I'm sorry --

MR. FINCH: -- seeking objection that is improper under the rules.

MR. BERNICK: Okay. Object to form. It misreads the document. If you're going to have a witness answer a question concerning the document, it should be properly read. 2.5 is greater than or equal to, it's not --

THE COURT: The objection is that the statement does not fairly -- the question does not fairly reflect the information on the document, and that is sustained.

Q Okay. Would you agree with me that for fiber exposures of one to 2.49, that's unlikely to result in asbestosis?

MR. BERNICK: Objection; lack of foundation.

A If the --

THE COURT: Wait. Wait, doctor.

THE WITNESS: I'm sorry.

THE COURT: This chart does not appear to relate to asbestosis. It's relative risk of lung cancer, not specifically asbestosis.

MR. FINCH: That's my point, Your Honor. My point is that these people have an increased risk of lung cancer even at levels of exposure far less than what one would expect to contract asbestos.

MR. BERNICK: You're --

THE COURT: Well, I don't know. The doctor was about to explain some issues he has with respect to the confidence intervals in looking at this chart. Perhaps if you want him to explain that answer, then maybe we can get to this question. Otherwise, I'm not sure that that fairly reflects this issue.

A First of all, the confidence intervals, so you mentioned in the never smoking group the exposure categories that included one as part of the confidence interval, and so from a statistician's point of view that means that the increase in relative risk may be or may not be due to chance. So that's one statistical point that I have to make. Secondly, you had questions regarding the likelihood of those exposure levels causing asbestos or not, and that would depend a lot on fiber type.

Q Okay. Well, you -- so you would agree with me the level of exposure necessary to cause asbestosis depends on the individual person's circumstances?

MR. BERNICK: Your Honor, at this point, the witness is now being made into a witness on what the epidemiology is of asbestosis, and that's being done in order to derive an

inference from this article. Fair -- if he wants to do it, fine, but then I'm going to have a short unfortunately re-redirect --

MR. FINCH: No, that --

MR. BERNICK: -- based upon this article because that goes beyond the scope of anything that I've asked him.

MR. FINCH: All right. I'll --

THE COURT: It does.

MR. FINCH: I'll withdraw the question, Your Honor.

THE COURT: This is recross, so you're limited to what was asked on redirect, and this was not.

MR. FINCH: Okay. Fine, Your Honor.

Q One final question on the Hughes-Weill study, pathology was not available for those workers, but pathology was a tool that was available to doctors in the 1990s to diagnose asbestosis, correct?

A That’s correct.

MR. FINCH: Okay. Thank you.

MR. MULLADY: I have nothing.

THE COURT: Mr. Mullady?

MR. MULLADY: No, thank you.

THE COURT: Mr. Bernick?

MR. BERNICK: No, thank you.

THE COURT: Doctor, you're excused. Thank you.

MR. FINCH: Your Honor, my partner Mr. Bailor is

going to handle the cross examination of this witness.

UNIDENTIFIED ATTORNEY: Here, you can just take my seat. Do you need to -- I'm going to bounce down the line here.

MR. McMILLAN: Good afternoon, Your Honor. Scott McMillan for W. R. Grace. We would like to call our next witness, Dr. Daniel Henry.

THE COURT: Dr. Henry?

THE CLERK: Stand and raise your right hand.

DANIEL HENRY, DEBTORS' WITNESS, SWORN

VOIR DIRE EXAMINATION

BY MR. McMILLAN:

Q Good afternoon, Dr. Henry. Could you please state your full name for the record?

A Daniel Henry.

Q What is your occupation, Dr. Henry?

A I'm a chest radiologist.

Q And in general terms, what have you been asked to testify about here today?

A A study that I performed on a group of claimants that espoused that they apparently suffered from a malignancy and had radiographic evidence of asbestos exposure.

MR. BAILOR: Your Honor, we would object on relevancy grounds.

MR. McMILLAN: Your Honor, the study that Dr. Henry

did was based upon two orders that this Court entered in early 2007 ordering the claimants to turn over radiographic evidence they had in support of their lung cancer and other cancer claims explicitly for the purpose of allowing us to conduct an analysis of that. Indeed, if these are claimants who state that they are relying upon this radiographic evidence in support of their claim of lung or other cancer, it is entirely within our purview to have our experts evaluate that radiographic evidence and to present testimony to the Court on the validity of that evidence.

THE COURT: Well, I'm going to overrule the objection for now. I'm going to take all of this evidence under advisement. I am going to see -- as I indicated earlier in the case, although I'm not sure I ever made rulings on the record, that I am taking all expert opinions under advisement in the case and I will rule on Daubert issues at the conclusion, and so this witness, as all other witnesses, will be accepted -- the testimony will be accepted in that view. Go ahead.

MR. McMILLAN: Thank you.

Q Dr. Henry, have you prepared any graphics in anticipation of testifying today?

A Yes, I have.

Q Would it assist you in your presentation today to use those graphics?

A Yes, sir.

MR. BAILOR: Counsel, may I have a copy of the graphics?

MR. McMILLAN: Oh, I'm sorry. I meant to give those out.

UNIDENTIFIED ATTORNEY: Thanks very much.

MR. McMILLAN: Could I have GG-2066, please?

Q Dr. Henry, could you please tell us about your education and medical training briefly?

A I'm a graduate of the St. Louis University School of Medicine. After an internship, I completed my training in radiology at the Medical College of Virginia, or Virginia Commonwealth University, in 1975.

Q Could you pull the microphone --

MR. BAILOR: Excuse me. Could we have the doctor pull the microphone a little closer? I'm having a little trouble hearing him.

THE COURT: We'll try. Did you -- do you need that repeated? He was explaining his educational background.

MR. BAILOR: I don't think we need that repeated.

THE COURT: All right. Thank you.

Q Doctor, after you completed your residency, where did you go to work?

A I was -- joined the United States Air Force where I was accorded the rank of major and assigned to Wilford Hall Medical Center as a teaching instructor to teach radiology residents in

the U.S. Air Force.

MR. McMILLAN: Could we have the next slide, please, which is GG-2067. Dr. Henry, after you left the Air Force, where did you go to work?

A I assumed a position at the -- in the department of radiology at the Medical College of Virginia.

Q And is that the institution at which you currently work today?

A Yes, sir.

Q What is your current position at that institution?

A I'm section chief of the section of thoracic imaging.

Q And do you also hold any faculty appointments?

A I'm associate professor of radiology and medicine in the School of Medicine at VCU.

Q Have you been employed at the VCU School of Medicine continually since about 1977 till the present?

A Yes, sir.

Q Could you please tell us which professional organizations you are a member of?

A I'm a member of the Radiological Society of North America, the Society of Thoracic Radiology, and I'm a member and fellow in the American College of Radiology.

Q What is the American College of Radiology?

A It's an organization that's devoted to the education and other benefits of its members in the process of radiology.

Q Now, I see that you say that you are a member and fellow. What does it take to become a fellow of the American College of Radiology?

A Well, it's somewhat of a secret process, but you're usually elected to this post following some extraordinary contribution to the welfare or benefit of the organization.

Q Have you served on any committees or done other work for the benefit of the American College of Radiology?

A Yes. I was invited to join the American College of Radiology Committee on Pneumoconiosis in 1990, based upon my activities as a B-reader and my teaching abilities.

MR. McMILLAN: Could we turn to the next slide, GG-2068, please? I see you've got it up there.

Q You used a term a moment ago which is "pneumoconiosis." Could you please explain what pneumoconiosis is?

A Pneumoconiosis is a medical term that is used to describe the diseases related to the inhalation of organic or inorganic dust.

Q And is asbestos one of the dusts that can cause pneumoconioses?

A Yes, sir.

Q I believe a moment ago you said that you were on a committee or a task force that related to pneumoconiosis for the ACR. What did you do on that committee?

A I was an instructor. The American College of Radiology

provides courses for those wishing to become certified as a B-reader or re-certified as a B-reader.

Q And have you done any other work besides serving on that committee for the ACR?

A Well, I -- currently I'm the chairman of that committee, but I also advise NIOSH on their teaching efforts as it relates to pneumoconiosis and other activities that relate to their home-study syllabus, the exams themselves and so forth.

Q What is NIOSH?

A NIOSH is the National Institute of Occupational Safety and Health.

Q And what role do they play with regard to B-readers and the B-reader course that you are teaching?

A They currently administer the examination and they run surveillance programs around the country for patients who perhaps might be exposed and might have pneumoconiosis.

Q Do you participate in any of those surveillance programs?

A Yes, sir, I do.

Q What do you do?

A I interpret films for them. I also review their teaching materials. Currently we have a project that is ongoing as we transition from analog, or basically plastic chest x-rays, to the digital arena, which is much more common in today's healthcare field.

Q So are you working with NIOSH in the transition to digital

x-rays as they relate to the B-reader program and the evaluation of pneumoconioses?

A The B-reader program, the evaluation of potential claimants, as well as the instructional process.

Q Do you do any work for the Virginia Worker's Compensation Commission?

A Yes.

Q What do you do?

A We evaluate radiographs of individuals who bring claims to the Commission.

Q And is the work that you do for the Commission itself?

A Yes, sir.

Q Are you retained by any plaintiffs or defendants in front of the Commission?

A No, sir.

Q Doctor, as part of your medical practice, do you have experience with asbestos-related diseases?

A Yes, I do.

MR. McMILLAN: If we could have the next slide, please, GG-2069.

Q Could you tell us a little bit about your experience with asbestos-related diseases?

A My practice is dedicated entirely to thoracic imaging, or chest radiology, and, in the course of the 30-year experience that I've had, we encounter patients who had asbestos

exposure.
Q And I may not have asked you this previously. Do you have a certain specialty within the field of radiology?
A Just thoracic imaging, or chest radiology.
Q Do you have any educational duties or responsibilities that relate to asbestos-related diseases?
A Well, basically I'm an instructor or teacher to -- as a physician in the school of medicine to radiology residents and pulmonary fellows on all aspects of thoracic imaging, including asbestos-related disorders.
Q Have you ever published in peer reviewed literature relating to pneumoconiosis or the ILO Classification System?
A Yes.
Q What have you published?
A I was invited to write an article about five years ago on the role of the ILO system and its current application in this arena.
MR. McMILLAN: Your Honor, at this point I would tender Dr. Henry as an expert in thoracic radiology.
MR. BAILOR: No objection, Your Honor.
THE COURT: He may offer an expert opinion in the field of thoracic radiology.
MR. McMILLAN: Could we turn to GG-2070, please?
Q Dr. Henry, does the chest x-ray play an important role in thoracic radiology?

A The chest radiograph is a ubiquitous study and it's, for all intents and purposes, the currency of healthcare. It's a very commonly ordered examination, commonly performed.
Q Is that one of the techniques or pieces of medical evidence that you deal with on a daily basis?
A Yes, sir.
Q What role does the x-ray play in the diagnosis of asbestos-related disease?
A Certain entities which could afflict the lung itself, the lung tissue itself, or the pleural surfaces, as well as malignancies associated with asbestos could be depicted on a chest x-ray.
Q I want to talk to you briefly about the standards for reviewing and classifying x-rays.
MR. McMILLAN: If I could have the next slide, which is GG-2071?
Q Doctor, what is the International Labor Organization?
A The ILO, or the International Labor Organization, is an arm of the United Nations which promotes for many years, or has promoted for many years, health and safety in the workplace.
Q And has the ILO issued any guidelines on the classification of chest radiographs?
A Yes, sir.
Q Could you explain what they've issued to us?
A The ILO has produced written guidelines for probably four

or five decades which are used in the evaluation of conventional chest radiographs for patients who may have been exposed to various dust in the workplace.

Q Are the ILO guidelines recognized internationally as a standard to be used when classifying chest x-rays?

A Yes, sir.

Q What is the purpose of the classification system?

A The purpose is to standardize the process of evaluation so that it can be reproducible and reliable in terms of the evaluation of various patients and in terms of the communication from body, or one physician, to another.

MR. McMILLAN: If I could have the next slide, please?

Q This is GG-2072. Could you explain to us briefly how the ILO classification system works, please?

A Well, first of all, one must familiarize oneself with the ILO guidelines, namely the process, as well as the group of standard radiographs which come with the guidelines which depict the pathology that is commonly seen with the various inhalations of dust, and then once one does that one must take the claimant or subject radiograph and compare it to the standard and determine whether there is evidence of abnormality or not and then, if so, abnormality being present, then to quantify it through the process of the ILO system, including the image quality, which is very important, the presence of

tissue abnormalities or parenchymal abnormalities, pleural involvement and other possible abnormalities that may be related to the pneumoconiotic process.

Q Now, when you say that you grade the abnormalities, could you explain to us, what do you mean by grading abnormalities?

A Well, basically, the ILO process is a way of standardizing the quantification of the abnormalities.

MR. McMILLAN: If we could turn to the next slide?

Q This is GG-2073. Can you tell us what this is, Dr. Henry?

A This is basically an evaluation form, or a pneumoconiosis surveillance form that's piloted (sic) on the ILO form.

Q Is the one that we have in GG-2073 the actual ILO form that you used as part of your study?

A Yes, sir.

MR. McMILLAN: I want to quickly go through the components of this, so if you could show the next slide.

Q In GG-2074, we've blown up Section 1A of the ILO form. What does this record, doctor?

A This is the evaluation of the image quality, and you'll see that on the far left-hand side, there are four categories, one through three, and then U/R, which means it's an unreadable study.

Q Why is it important to grade the film quality?

A Because the quality of the study will have a bearing on the accuracy of the interpretation.

Q And why is that?
A Because the presence of artifacts, under or overexposure, could conceal or enhance the detection of abnormalities.
MR. McMILLAN: Could I have the next slide, please?
Q This is GG-2075. We've now highlighted Section 2A and B which relate to parenchymal abnormalities. What are parenchymal abnormalities?
A These are basically abnormalities of the lung tissue itself which are presented as small opacities, which is referred to in 2B.
Q And how would you record that on the ILO form?
A Well, as you can see, the -- 2B is divided into several sections, and your first responsibility is to determine whether the small opacities present are either rounded, which are commonly associated with silica and coal workers pneumoconiosis, or irregular or linear, more frequently associated with asbestos exposure.
Q What is an opacity?
A An opacity is a small density which occurs on the x-ray which is indicative of underlying pathology related to the inhalation of dust.
Q I see that under 2B there's a small C that says, "profusion." What is profusion?
A Well, as you can see -- actually, we should start with the prior diagram which is zones that each lung is divided into,

three zones, an upper, middle and lower zone on each side, left and right, and then the person who classifies the study is asked to then determine what the concentration or profusion of the small opacities are within each individual zone and come up with a summary of the entire profusion for the entire chest.

Q I see that there are 12 boxes under profusion. Can you explain what you're doing when you're trying to select the appropriate box?

A Well, this is a scale. You see in the upper left-hand corner there is zero/naught, which means the study is absolutely cold, normal. There are no opacities. And as you go from left to right and then down the various columns, you'll see that the numbers increase, and with the increasing numbers that implies that you have a larger concentration of abnormality of opacities.

MR. McMILLAN: If we could turn to the next slide, GG-2076?

Q We've highlighted Sections 3A and B from the ILO form. I notice this refers to pleural abnormalities. What are pleural abnormalities?

A Pleural abnormalities are basically the manifestations of exposure which might impact the parietal pleura, or the lining of the thoracic cavity itself, or the visceral pleura or the lining that's around the lung.

Q And just to be clear, Section 3 relates to the pleura,

where Section 2 relates to the parenchyma. Just is broad-brush terms, what's the difference?

A Well, the difference is, is that Section 2 relates to the lung tissue itself, and the -- Section 3 relates to the lining of the thoracic cavity on -- in either hemithorax, left and right, as well as the lining around the lung itself. So, it's distinctly different from the more internal parts of the lung or the lung tissue itself.

Q Now, I see in Section 3B that there's a space to record information about pleural plaques. What are pleural plaques?

A Pleural plaques are basically areas of focal fibrosis with -- usually within parietal pleura.

Q And I see that you have, "In profile, face-on and diaphragm." What's the difference?

A The difference is that in profile, there's a plaque that appears along the lateral edges of the chest, which is visible, there in profile, as opposed to a plaque which exists on the front or the back of the chest, which on a frontal chest x-ray would be seen face-on or "on fas" (phonetic).

MR. McMILLAN: Can we move to the next slide, please, GG-2077?

Q We've now highlighted Sections 3C and 3D of the ILO form. Could you explain what gets recorded here, please?

A This again is a continuation of the evaluation of the pleura, and it relates to the area of the lung called the

costophrenic angle, which is where the diaphragm, which separates the chest cavity from the abdominal cavity, occurs, and in the upright individual on a chest x-ray, shall we say, it's the angle where the diaphragm meets the chest wall.

Q Okay. And what does it mean if that angle is blunted?

A If that angle is blunted, then one would certainly have to consider the presence of diffuse pleural thickening, the theory being that diffuse pleural thickening generally arises following a pleural effusion, which would occupy that angle, and therefore if there was a residual of pleurator (phonetic) thickening that angle would be blunted and therefore would be a sign that there could be the presence of diffuse pleural thickening.

Q What is diffuse pleural thickening?

A It again is a fibrotic process that occurs in the visceral pleural, which is the lining of the lung itself, as opposed to a plaque, which involves the parietal pleura, or the lining of the chest wall.

Q And what does it mean when the pleura is thickened?

A It's an indicator of a fibrotic process in a particular lining of the lung and that you want to be able, hopefully, to distinguish that from a pleural plaque basically.

Q And is blunting of the costophrenic angle one of the features that you look at to try and differentiate between the two?

A By convention that the fact that pleural plaques rarely ever involve the costophrenic angles, whereas diffuse pleural thickening does, that's how we distinguish one from the other.

MR. McMILLAN: Could I have the next slide, GG-2078, please?

Q You'll see here we've highlighted Sections 4A and 4B from the ILO form. Could you explain what gets recorded here, please?

A This is basically a shorthand that the reader would use to connote the presence of other abnormalities. If you note, on the far right-hand line, on the line in the far right, there's the abbreviation, "TB," which means if you thought there was tuberculosis present, you would check that particular box. Somewhere in the center there, there is the abbreviation, "EM," which stands for emphysema. On the far left is another abbreviation, "AA," which stands for atherosclerotic aorta, which is another radiographic finding. And in between are several other abbreviations which connote the presence of various findings which are sometimes associated with an inhalational dust disorder. Others are not, such as the abbreviation of "CO," which simply means that the heart is enlarged, which may be totally unrelated and probably is unrelated to dust inhalation.

Q Doctor --

A So it's a shorthand to prevent a lot of handwriting

basically.
Q Dr. Henry, the form that we've been looking at here, this is the actual form that the independent B-readers you retain used when evaluating x-rays in this case?
A Yes, sir.
Q And is this based on the ILO form that NIOSH uses when they are certifying B-readers?
A Yes, sir.
MR. McMILLAN: I'd like to move on to the next slide, please, which is GG-2079.
Q Dr. Henry, what is the purpose of the ILO classification system that we have just been reviewing?
A Basically it's to provide a standardized process of evaluation and quantification of the abnormalities present on a chest radiograph and a person who may have been exposed to inhalational dust.
Q Has the ILO Classification System been adopted in the U.S.?
A Yes, sir.
MR. McMILLAN: Could I have the next slide, please?
Q How has it been adopted in the United States? This is GG-2080.
A Following a mining tragedy in the late '60s, the federal government mandated the U.S. Public Health Service develop a system to evaluate chest radiographs of miners at that time who

might be exposed and -- in terms of a preventive measure and for compensation, and so they realized that there were not -- there was not a group of readers out there, or people who were familiar with this process. So they commissioned the Public Health Service to develop a process of teaching these physicians the various methods of evaluating these studies.

Q And did the Public Health Service -- how did they go about teaching a group of physicians how to use the classification system?

A The Public Health Service at that time turned to the American College of Radiology and asked them to become instructors and to develop a course of instruction to better promote the understanding of how the system would be utilized.

Q And is that course that you currently today are a faculty member for?

A It's not quite the same course, but basically, yes.

Q How many different faculty members are there today who teach the asbestos-related portion of the ACR course for the B-reader exam?

A Those duties are split by myself and one other person.

Q Did there come a point in time when the Public Health Service turned over this classification program to NIOSH?

A Whenever NIOSH became an entity, and I'm not -- I think was in the early '70s, they handed off the ball to NIOSH, Public Health handed it off to NIOSH and NIOSH then is

responsible and has been for the last several years.

MR. McMILLAN: If we can go to the next slide, please, GG-2081?

Q We've talked a bit about B-readers, but could you just explain what is the B-reader program?

A The B-reader program is a program that the NIOSH -- that NIOSH orchestrates and governs, and it relates to individuals, physicians, licensed physicians, who wish to be certified for the interpretation of pneumoconiosis studies using the ILO system.

Q And that is the purpose of the B-reader system?

A Well, basically it's to hopefully guarantee a more reliable and accurate interpretation of these studies.

Q Is there an examination that is part of becoming a B-reader?

A Yes, sir.

Q Can you tell me a little about that?

A Anyone wishing -- or I should say a licensed physician wishing to become a B-reader must take a six-hour examination, which is comprised of classification of 125 studies.

Q Is there a re-certification requirement?

A Re-certification occurs every four years with a smaller group of films. Basically I think it's a three-hour test, and you interpret or classify 50 studies.

Q Is there a difference in the type of x-rays or studies

you're evaluating on re-certification from the initial exam?
A Yes.
Q What is the difference?
A The initial study -- the certification study involves a larger scale of more common abnormalities, and the re-certification exam is a little more focused on the subtle abnormalities that are sometimes -- sometimes encountered.
Q How long have you been a B-reader?
A Since 1985.
Q How many times have you had to take the re-certification exam?
A Five times I believe.
MR. McMILLAN: If we could go to the next slide, please, which is GG-2082?
Q Does NIOSH have a recommendation on whether or not the ILO Classification System applies in contested matters?
A Yes. They have the Website, which you see presented here which presents recommendations for a variety of settings where the ILO system may be employed, contested proceedings being one of them.
Q So, in the first bullet we have here on the ILO system, NIOSH recommends or states that it's necessary, to ensure fairness and equity in contested proceedings, to use the ILO Classification System. Is that right?
A That’s correct.

Q What does NIOSH recommend in terms of the number of readers that should be used when doing classifications in a contested matter?
A They require -- or they suggest a minimum of two, and most likely three, to determine if there is a lack of agreement.
Q Does NIOSH have a recommendation about whether readers should be blinded when reading in a contested matter?
A Yes, sir.
Q What's that recommendation?
A Well, it is that they should be blinded to the exposure history and the identity of the individual and any other information which might bias their interpretation.
Q Doctor, is it important when you are attempting to conduct a reliable study to follow the ILO and NIOSH recommendations?
A I believe so, yes.
MR. McMILLAN: Could I have the next slide, please, GG-2083?
Q Why is it necessary?
A Well, if you want to have an accurate and reliable outcome, it's important to incorporate the standardized process that's been accepted in the literature, including the ILO guidelines and the suggestions and recommendations of NIOSH.
Q Well, let's go through this. Why is it important to blind the readers when you're attempting to do a reliable study?
A In order to prevent any bias that might creep in.

Q Why is it necessary to use standard films when attempting to do a reliable classification study?

A Well, standard films are a critical part of the ILO system, and it allows one to compare the claimant, or subject radiograph, to a standard radiograph in order to develop a more confident evaluation and classification of that particular study.

Q Why is it important to use three independent readers when attempting to do a reliable classification study?

A Again, from experience, I believe NIOSH has recognized, and you find this repeated in the literature and many papers, that the multiple readers I think provides a better sense of reliability and accuracy than just a single reader.

Q And finally, why is film quality important when attempting to do a reliable classification study?

A As I discussed earlier when we talked about film quality on the B-reader form, it can alter the impression and the interpretation of small opacities which may be very subtle and could be obscured or could be enhanced by the various techniques employed in conventional radiography. So good film quality is essential.

Q Doctor, I want to switch topics briefly. When conducting reviews under the ILO system, what is a positive result for asbestosis?

MR. McMILLAN: Could I have the next slide, please?

A Well, currently it's the determination that the small opacities present reach a threshold greater than or equal to 1/0.

Q Now, was that recommendation of the American Thoracic Society in 2004?

A Yes, sir.

Q Prior to that date had the American Thoracic Society taken a position on what level of profusion was necessary to diagnose asbestosis?

A Yes, sir. In 1986, the guidelines, again from the ATS, stipulated a threshold of 1/1.

Q And when they changed it 2004, did they provide the scientific evidence or rationale for that change?

A In my opinion, no.

Q Why is that?

A Well, if you look at the fine print when they make this recommendation, they say that there is no clear-cut distinction between 0/1, which would be a negative study, and 1/0, which in their eyes would be a positive study. Secondly, there is no 1/0 standard. This is a total arbitrary decision that the reader makes on his or her own. And third, it's a determination that can be very much affected by film quality and by the possibility of opacities from other sources unrelated to dust exposure entering into the evaluation and producing findings that would simulate the earliest findings of

an asbestos or another pneumoconiotic process.
Q Now, you said a moment ago there's no 1/0 standard film. Is there a 1/1 standard film?
A Yes, sir, there is.
Q Does that factor into why you believe it's more reliable to use a 1/1 for diagnosing asbestosis?
A Well, I'm falling back on the '86 guidelines, which I think are valid, and also the presence of the 1/1 standard, which then takes away the arbitrary determination of the reader.
Q You also said a moment ago that there are other conditions that could mimic a 1/0. What were you referring to?
A Well, this is a controversial area. However, there are studies out there which suggest that there are individuals who have had no dust exposure, other small opacities, primarily due to smoking, which can simulate the earliest findings of dust-related diseases.
Q So are you saying -- what do you see as the utility of a 1/0 reading?
A Well, I think it has a limited utility except in vary unique circumstances. I am very enthusiastic about the earliest detection that we can possibly make of abnormality or disease. However, I think we have to recognize the limitations of this particular process of using that standard for the reasons I alluded to earlier.

Q Doctor, what are medical screenings in the broad sense of the term?

A Medical screenings are tools used to evaluate the early presentation of an abnormality or dysfunction in hopes of promoting an intervention of some type that would then arrest the process (indiscernible).

Q I'm sorry?

A That would arrest the process or possibly cure it.

MR. McMILLAN: Could I see GG-2085, please?

THE COURT: Wait, I'm sorry. Medical screenings are used to evaluate the early detection, and then I lost it. I'm sorry.

THE WITNESS: Okay. The early detection of a pathologic process or dysfunction in terms of promoting an intervention which might then arrest the process or possibly cure it.

Q What are some examples of medical screening?

A Mammography is probably the commonest and most readily recognized type of screening tool.

Q And are these useful techniques in most circumstances?

A I think there's been abundant literature which supports it, yes.

Q Have you had any personal experience with screenings in the litigation context?

A Yes, I have.

Q What is that experience?
A In the late '90s, I was contacted by a representative from N & M Company and requested to evaluate and do B-reads, if you will, on 300 chest radiographs.
Q Did you review those radiographs?
A I did.
Q What did you find?
A I found that they were for the most part negative. I found also that their film quality was poor and that the films had already been pre-read.
Q How did you know the films had already been pre-read?
A There were notations on the jackets.
Q And was their any indication of what the prior reading was?
A Yes, sir.
Q And what was it?
A They were positive.
Q And did you agree or disagree with those prior findings?
A I disagreed with the majority of the prior findings.
Q Did you relay your reads to N & M?
A Yes, sir, I did.
Q What was their reaction?
A There -- I --

MR. BAILOR: Objection; hearsay.

THE COURT: What he told somebody else is hearsay?

MR. BAILOR: No, what they told him is hearsay.

THE COURT: Oh, yes. That is hearsay.

MR. McMILLAN: Understood, Your Honor, but we are offering it for the purpose of Dr. Henry's experience with a litigation screening and how that impacted his understanding of the reliability of those screenings.

THE COURT: What's the difference? It's still hearsay.

MR. McMILLAN: But I'm not offering it for the truth of the matter. I'm offering it for the impact it had on this witness and his understanding of the reliability of these litigation screens.

THE COURT: I think I understand from his prior testimony already what the impact would have been. It's still hearsay. The objection is sustained.

Q Based on your experience with N & M, did you have an impression of the reliability of the prior reads that you saw on those x-rays?

A Well, they didn't agree with my interpretations.

Q Doctor, have there been other studies of the reliability of x-ray reads from litigation screenings?

A Yes, sir, there have.

Q Can you tell me a little about them?

A There's a study in the late '90s from Penn State which evaluated the Manville Trust, audited the radiographic

findings, and there was the so-called Gitlin study, which was published in 2004, which evaluated the comparison of claimant readings versus an independent panel.

Q And in broad terms what did those two studies find?

A They found significant disparity --

Q Disparity --

A -- between the original readings and the readings done by an independent panel.

Q And by "original readings" are you referring to readings that came out of litigation screenings?

A I presume that was the case, yes, sir.

Q Around the time that those studies came out, were there other factors that you, as a thoracic radiologist, became aware of that caused you to question the reliability of litigation-related x-ray readings?

A Well, there were some legal proceedings in Texas, I believe. There were congressional hearings. There was somewhat of a general buzz, if you will, for a lack of a better way to explain it, among by colleagues and other B-readers that we knew there were some things that were occurring that we were kind of concerned about. There was an instance, I believe, reported in one of the trade journals where a radiologist was approached at a national meeting and offered money to sign a blank B-reader form. So there were things of that type which created some sense of concern and caution on my part.

Q Were you subsequently asked to conduct a study of the reliability of the claimants' x-ray reads in this case?
A Yes, sir.
Q What were you asked to do?
A Again, we were asked to evaluate or draw up a protocol to evaluate the presence or absence of asbestosis or interstitial fibrosis in a group of claimants who espoused that they had a malignancy and then radiographic evidence of asbestos exposure.
Q So, the group of claimants that you were looking at were claimants who were alleging that they had radiographic evidence of asbestos exposure to link their malignancy to asbestos?
A Yes, sir. My screen is gone here, by the way.
Q Yes, that's okay.
A All right.
Q In accepting that project, what was your goal?
A Well, based upon the issues that were in the literature and some of the more ambient concerns I had about the process, the B-reader process, and the fact that I had been engaged with it for over 20 years, I wanted to design the most precise and scientific process I possibly could in hopes of developing a reliable result, regardless of what it was, in terms of the study we were going to undertake.

MR. McMILLAN: I'd like to skip ahead to GG-2087, please.

Q Doctor, could you walk us through the process you used

during your x-ray study?
A Okay. We began with 5,438 claimants that were identified on the questionnaire, and that group was then reduced to twenty-eight hundred and fifty-seven by various filters that were added, such as the timing of when the chest radiographs were obtained or submitted, various other demographic data and compliance with -- I think there were some certifications that had to be filed with the films and so forth. So, we came down to a study pool of twenty-eight hundred and fifty-seven claimant studies.
Q So, if I understand, the fifty-four hundred claimants were the number in the PIQs that alleged they had radiographic evidence to link their cancer to asbestos --
A That’s correct.
Q -- and that you got it down to twenty-eight fifty-seven based on various criteria?
A That’s correct.
Q In addition, was -- did part of it depend on which claimants actually submitted x-rays?
A Well, there were claimants who claimed they were going to submit x-rays which did not, so there were actually some instances where there were no x-rays.
Q And then once you had the twenty-eight fifty-seven claimants, what did you do with that group?
A Well, at this point we wanted to derive a sample, which

would be representative, of approximately 500 examinations or evaluations of the chest x-rays, and so we had a goal of developing 500 in each category. One category would be those who had filed an x-ray with an accompanying B-reader form, and the other group would be those that just simply filed x-rays without B-reader forms, but would be representative of all law firms which had submitted claims. So we took 500 and we divided by twenty-eight fifty-seven, and you come up with approximately .175. You multiply .175 by the number of x-rays that were produced by a given firm. And that's how we arrived at the numbers that we did in the various pools. If someone -- we had at least one from each firm, if you will. If they didn't have a larger number -- if they just had one study then they were incorporated so every firm would be represented.

Q And by "firm" you mean law firm who had claimants submitting radiographic evidence?

A Yes, sir.

Q So once you had your two samples of roughly 500 claimants, what did you do next?

A Well, we had them interpreted by three independent readers.

Q And then what did you do with the results of those interpretations?

A We tabulated them.

MR. McMILLAN: Let's skip to GG-2090.

Q Dr. Henry, in devising the protocol for your x-ray study, do you believe that you designed a reliable study protocol?
A It was my goal to design and oversee the most stringent and scientific process possible, given the limitations of what we had of time and so forth.
Q Can you tell us what you did in the design of your protocol that was meant to maximize the reliability of your study?
A Well, we used three independent readers, three blind and independent readers. The readers were -- they didn't even know who the other readers were. We kept them separate. They were told not to talk to one another. If they did encounter one another, do not discuss any of the cases. They were never told for whom they were reading the studies. They didn't know the end goal of the project at all. They were just asked to provide B-readings.
Q Did you determine the number of readers in advance of conducting your study?
A We did. In accordance with NIOSH guidelines, we determined up-front that we were going to use three readers and then use a majority, or consensus, reading.
Q How did you select the three readers for your study?
A These individuals were persons known to me as academic physicians who were B-readers of at least 20 years who I knew were highly qualified.

Q Who provided the x-rays that you used during your study?
A All of the x-rays were provided by claimant law firms.
Q And did you use control films as part of your analysis?
A Yes, sir. As an additional quality assurance measure, I introduced, unknown to the readers, 47 control studies.
MR. McMILLAN: I'd like to flip to the next slide, please, which is GG-2091.
Q What are control films, Dr. Henry?
A Control films are those that we have incorporated, which are both normal and abnormal, to determine the reading tendencies of our readers.
Q So I take it that you know in advance -- or you selected the control films?
A I did.
Q And what was the purpose of inserting those control films?
A Mainly to be certain that someone wasn't (indiscernible) over-reading or under-reading the images.
Q And did you then compare your three independent readers' reads to what you knew to be the results for those control films?
A Yes, we did.
Q And what did you find?
A Well, they correctly identified the positive studies 86 percent of the time and the negative studies 88 percent of the time.

Q And what was your takeaway from that?
A That there was very little under-reading or over-reading tendency on the part of our readers.
Q And did that give you confidence in the results of the other readings that your B-readers were doing?
A It would enhance it significantly, yes.
MR. McMILLAN: I'd like to go to the next slide, please, which is GG-2092.
Q Dr. Henry, is GG-2092 a reproduction of a chart from your expert report that summarizes the results of your x-ray study?
A Yes, sir.
Q Is this a complete and accurate portrayal of the results from your x-ray study?
A Yes, sir.
MR. McMILLAN: Your Honor, I would move GG-2092 into evidence.
MR. BAILOR: Your Honor, we would object on the relevance grounds previously stated.
THE COURT: It's overruled on that basis. It's accepted as a summary.
Q Doctor, before I ask you about this, I would like you to just look in your binder for one moment, please, and do you see the tabs for GX284 and GX285?
A I do.
Q If you could look at those briefly, can you tell me, are

those the protocols that you used in conducting your x-ray study?

A Yes, sir, they are.

Q Are they true and accurate copies of the protocols you used in conducting your study?

A Yes, sir.

MR. McMILLAN: I would move GX284 and 285 into evidence, Your Honor.

MR. BAILOR: Objection; relevance.

THE COURT: Same ruling; overruled on the same basis.

Q And finally, doctor, would you look at GX286, GX327 and --

THE COURT: Wait. I'm sorry. What was the first one, 286?

MR. McMILLAN: 286.

THE COURT: All right.

MR. McMILLAN: GX327.

THE COURT: All right.

MR. McMILLAN: And GX104.

(Pause)

Q Do you see those, doctor?

A Once again?

Q GX286, 327 and 104.

A I must be overlooking it, but I don't see 104 here.

THE COURT: It's --

Q Look at the very beginning.

A Very beginning? Okay. Sorry.
Q Have you seen them now?
A I have, yes.
Q Are those three exhibits copies of the data that you collected as part of your B-reader study?
A Yes, sir, they appear to be.
Q And are they true and accurate compilations of the data that you used to prepare the chart that we have in evidence as GG-2092?
A Yes, sir.
MR. McMILLAN: I would move to enter Exhibits GX286, GX327 and GX104 into evidence.
MR. BAILOR: Continuing relevance objection.
THE COURT: Same ruling. They're admitted.
Q Doctor, I want to turn to GG-2092, please. And you said a moment ago that these are the results of your x-ray study. I'd like to start on Line 1 with the ILO firm sample. Can you explain to us what the result of your x-ray study was for the ILO firm sample?
A We had 471 claimants who provided chest radiographs with an ILO form, and our three independent readers identified 33 out of the 471 that had a profusion of small opacities that were greater than or equal to 1/0, for a total of seven percent of the total.
Q How does that compare to the B-reads that had been

submitted by those claimants for the very same x-rays?
A As you can see further on the first row there, or first column, excuse me, not first row, out of 471 studies that were evaluated, the claimant readers found that 383 of 471 had findings of -- indicating a profusion of greater than or equal to 1/0, or approximately 81 percent.
Q What was the result that you found for the all firm sample?
A Well, as you can see, when we had 507 evaluations, a positivity of 37, for a percentage of positivity of 7.3 percent.
Q Is that consistent with the result that you found for the ILO firm sample?
A Well, it's very, very close, as you can see, 7.1 -- 7.01, 7.3 percent, very, very close.
Q Doctor, when you got the results for the ILO firm sample and saw that your independent readers found seven percent had a 1/0 or greater compared to over 80 percent for the ILO -- for the readers from the claimants, what was your reaction?
A Well, this was very unexpected. We were -- I was basically shocked to see this difference.
Q And why is that?
A I just didn't think there would be that much of discrepancy. I might have expected something -- some discrepancy, but nothing of this magnitude.

MR. McMILLAN: Well, let's look at the next slide for a moment, please.

Q This is GG-2093. If we start on the left-most column, doctor, what was the population that you were starting with, the population of people who could potentially participate in your study?

A The purple column is the claimants alleging radiographic evidence of asbestos exposure, basically.

Q So all of the claimants who were potentially eligible were people who were alleging they had radiographic evidence of asbestos-related exposure to link their malignancy to asbestos?

A That's my understanding, yes, sir.

Q And then when a subset was selected that had their own claimant B-reads, what was the result of their own claimants' reads of those x-rays?

A Well, they found in the samples that we previously mentioned that they had an 81 percent positivity rate.

Q And how does that compare to what your independent readers found for those very same individuals?

A Again, we had a positivity rate of approximately seven percent across all categories.

Q Now, the difference between 81 percent that their claimants -- their claimant readers found and the seven percent that your independent readers found, is that kind of difference something that can be accounted for with inter-reader

variability?
A I don't believe so. I mean, inter-reader variability is always a factor in any type of a comparison evaluation. However, in my interpretation of the literature of a similar type of study, I did not encounter or have not encountered to this point anyway, anything of this magnitude that could be explained by inter-reader variability.
Q How you found any published article or any study where people are looking at the same x-rays and found a difference of over an order of magnitude in the positive rate due to inter-reader variability?
A Not to the best of my knowledge, no.
Q Dr. Henry, following up on the results that we just looked at, did you do an additional analysis that compared your independent readers to specific claimant B-readers?
A I'm sorry, I didn't understand your question.
Q Did you follow-up the data that we just went through by comparing your independent panel reads to specific physicians who were claimant B-readers?
A Yes, sir, we did.
MR. McMILLAN: Can I see GG-2094?
Q Doctor, is GG-2094 a replication of a table that appears in your July 2007 expert report?
A Yes, sir.
Q Is this a true and accurate portrayal of the results of

your analysis comparing your panel of B-readers or your independent B-readers to specific claimant B-readers?

A Yes, sir.

MR. McMILLAN: Your Honor, I would move this in evidence.

MR. BAILOR: Objection. Relevance.

THE COURT: Overruled on the same basis.

Q And one last point before I get into it, Dr. Henry, if you look in your binder, do you see GX-582 and GX-583?

A Yes, I do.

Q Are GX-582 and 583 the data sets that you relied on in putting together the table that is GG-2094?

A Yes, sir.

Q And are those true, accurate, and complete versions of the data sets that you used to create GG-2094?

A They appear to be, yes.

MR. McMILLAN: Your Honor, I would move them in evidence.

MR. BAILOR: Again, we object.

THE COURT: Same ruling. They’re admitted.

Q Doctor, if we look at GG-2094 for a moment, can you explain what you did here?

A Basically, we took any individual reader who had a minimum of 15 interpretations and determined the percent of positivity, and then compared it to our readers to determine what the

percentage of over-read was.
Q Okay. If we take an example -- if we take Phillip Lucas about two-thirds of the way down, can you use that as an example to explain exactly how this works?
A Right. Lucas read 20 studies. Had a reading of -- all of them were -- (indiscernible) all of them as positive for a 100 percent positivity rating which would then be 100 percent over-read as compared to our readers who found all of them negative.
Q Okay. So, he found them all positive and your panel found them all negative?
A Right.
Q What about Jay Segarra (phonetic) near the bottom? What happened with Dr. Segarra?
A As I recall, he had -- well, he had 17 interpretations, one of which was negative and 16 were positive. And so, therefore, he had a positivity rate of approximately 94 percent. And then, according to our readers, an over-read of approximately 94 percent.
Q Doctor, as a result of your x-ray study, both the table that we looked at from -- that compared overall percentages of greater than 1/0 -- greater than or equal to 1/0 from your study compared to the claimant readers, as well as the study looking at specific claimant physicians, did you reach any conclusions?

A Well, I think we did a very good study, number one. I think we followed the appropriate guidelines and produced a high quality scientific study.
Q Well, if I -- well, (indiscernible). If I could look at GG-2095, doctor, what are your conclusions with regard to the quality of the study that you did?
A Well, as I said, we followed accepted scientific methods. We employed the appropriate number of B-readers, and we determined that the percentage of abnormality, if you will, of studies that were greater than or equal to 1/0 which is approximately seven percent.
Q What's the takeaway from your study?
A Well, we had a very small number of patients who presented with positive findings.
Q And what does it mean to present a positive finding?
A Well, basically that they reached a threshold of abnormality that was predetermined as 1/0.
Q So, is it fair to say that the patients who -- only seven percent of your patients had greater than or equal to a 1/0, correct?
A That's correct.
Q So, are those the only ones who can show that they have radiographic evidence of asbestosis based on their chest x-ray?
A Based upon their chest x-rays, yes, sir.
Q And so, are they the -- those seven percent the only

individuals who can show that there is actual damage to the lung tissue based upon their chest x-ray?

A That could be one interpretation, yes, sir.

Q Did you reach any conclusions with regard to the reliability of the claimant readers?

A Well, I think based upon the significant magnitude of differences between the three independent readers and the claimant readers, it would give me great pause regarding the reliability of those readings.

Q Did you reach any conclusions with regard to the reliability of readings that come out of litigation screenings?

A Again, I think it would give me great pause based upon my own personal experience that there would be -- that they're not accurate.

Q And with regard to diagnoses of asbestos-related disease that are based upon these claimant B-reads, do you have an opinion about the reliability of those diagnoses?

A If those diagnoses are predicated on the evaluation of the claimant x-rays, then I think they would also be suspect.

Q Thank you.

MR. McMILLAN: I have no further questions at this time.

CROSS EXAMINATION

BY MR. BAILOR:

Q Good afternoon, doctor. How are you?

A I'm fine.
Q Doctor, your study was not any random study, was it?
A It was a random setting. These cases were selected randomly from the pool.
Q But, you divided the x-rays up into various pools designed to get a certain specific number of law firms, is that not correct?
A We did a -- we had a target of a particular number of cases to make a representative sample, but all of the cases were randomly selected in both pools.
Q Now, you mentioned that digital x-rays were becoming much more common. You excluded digital x-rays from your study, did you not?
A No, we did not exclude digital x-rays, we excluded miniaturized x-rays.
Q How about x-rays that were on CD-ROM?
A No, sir. We had no way of evaluating them.
Q And you also did not include computer topography studies or high resolution computed topography studies, did you?
A I excluded them, yes, sir.
Q Now, you said you discussed the subject of bias in the selection of your readers and said one of the reasons why multiple readers were recommended was to eliminate the possibility of bias, is that correct?
A That helps, but it's not the only reason you have three

readers.
Q Now, you didn't follow the (indiscernible) recommendation of selecting your readers from the largest available pool of B-readers, did you?
A I selected the B-readers from the largest pool that I knew.
Q And how many is that?
A Fifty, 60, 70. Something like that.
Q And you selected academic B-readers?
A I did.
Q And now, what steps did you take to ensure that your academic B-readers were not biased?
A Well, the most important step was the blinding of the readers to any knowledge of why we were doing the study, who was sponsoring it, what the outcome might be and so forth.
Q Now, Dr. Lee Syder was one of your readers, was he not?
A He was.
Q Were you aware of the fact that Dr. Lee Syder has testified for defendants in 26 cases?
A No, I was not.
Q Dr. John Parker is one of your B-readers, is he not?
A He certainly was.
Q Yes. And he's one of Grace's expert witnesses in this estimation proceeding, is he not?
A I believe he is.

Q And he's also testified adversely to asbestos claimants before the U.S. Senate.
A Perhaps. I don't know that.
Q He testified on behalf of (indiscernible) insurance companies, are you aware of that?
A No, sir, I was not.
Q Now, you testify that one of the reasons of the perfusion study is to ascertain if there's radiographic evidence of asbestos exposure, is that correct?
A Say that again, I'm sorry?
Q If I understood you correctly, one of the purposes of the perfusion reading is to determine if there is radiographic evidence of asbestos exposure, correct?
A The perfusion --
MR. McMILLAN: I'm going to object that this characterizes the witness testimony who's looking for whether or not there was perfusion.
UNIDENTIFIED SPEAKER: We can't hear you.
MR. McMILLAN: He was looking at whether or not there's perfusion greater than 104 asbestosis.
THE COURT: I think the witness was about to correct the statement and can clearly answer on his own. The objection's overruled.
A The perfusion deals with the presence or absence of (indiscernible) tissue abnormalities, and they're very

non-specific. And I think they should be distinguished form radiographic findings such as pleural plaque or a calcification which is much more specific in terms of attributing the exposure to asbestos.

Q Okay. So, you would agree with me that pleural plaque shows evidence of exposure to asbestos?

A Most of the time. There are other etiologies for pleural plaques, but the vast majority of them are asbestos exposure.

Q How many of your films showed evidence of pleural plaques?

A It wasn't the focus of our study, and I have to recall from memory, but I think it was in the vicinity of 20, 22 percent, something like that.

Q So, 22 percent of the films did show evidence of significant --

A I'm guessing because it wasn't the focus of this presentation, so I'm recalling from memory from several months ago.

Q Now, you discussed on your direct examination what you called screening examinations.

A Yes, sir.

Q What is (indiscernible) recommendation as to the number of readers who should be present on -- should be utilized for a screening exam?

A I don't know.

MR. BAILOR: May I approach the witness? I'm handing

the witness what's been marked as ACC/FCR/2041.

THE COURT: Thank you.

Q Is this the NIOSH standard that you were referring to when you discussed the practice in contested proceedings?

A Yes, sir, it is.

Q This does not deal with screening examinations, does it?

A No, I don't believe I said that, did I?

Q No, this standard does not apply to screening examinations at all?

A I don't believe so, no.

Q I will now hand you ACC/FCR/2040, another NIOSH study. Doctor, can you identify what ACC/FCR/2040 is?

A I believe this is a reprint from the NIOSH website entitled "Chest radiography," and then subheading, "Recommended practices for reliable classification of chest radiographs by B-readers."

Q Now, I would like to call your attention, doctor, down to the heading, "Worker monitoring and surveillance." Do you see what I'm referring to there?

A I see it there, yes, sir.

Q And I would like to specifically invite your attention to Paragraph 4 of that. Now, when we talk about worker monitor known surveillance, is that your understanding of what is known as a screening examination?

MR. McMILLAN: I'm going to object, Your Honor, to

the extent that there's a false characterization that litigation screenings done to file claims is something other than a contested matter.

MR. BAILOR: There is no evidence, Your Honor, that the initial screenings of these people were done necessarily to file claims. Some may have been, some may not have been.

THE COURT: That's the case. I don't think I have any evidence about what the initial classification was for -- initial screening was for.

MR. BERNICK: A point of fact, and I don't mean to interrupt for Mr. McMillan is here, but -

MR. BAILOR: Your Honor, I object --

THE COURT: That's sustained, too. You've got a person who's making objections. My understanding is that you get one person making objections, you don't get a house. So, you can talk to counsel if you want.

MR. BERNICK: Very well.

THE COURT: Let me -- in any event, the objection is overruled. I don't believe I have any evidence with respect to how initial x-rays were put together, beside which I believe this witness is very confident to answer this question. Go ahead.

A Your question again, sir?

Q I would invite your attention, doctor, to Paragraph Number 4. It says, "Number of readers and summary classifications. A

Symbol B-reader classification of an east chest radiograph is generally sufficient. Additional independent classifications may be needed to ensure reliability within the program." Does that -- is that consistent with your understanding of what is required when we have a worker monitoring a program as opposed to a reading for a contested proceeding?

A That's their documentation, yes, sir. That's what they're saying.

Q And when they're doing worker monitoring, I would invite your attention to Paragraph 5 with respect to blinding. There is says, if I read this correctly, "Blinding; in order to facilitate disease detection in environments where individuals are potentially at risk, blinded classification is not desirable." Did I read that correctly?

A You did.

Q Do you know why that is?

A I wouldn't know why they would put that in there.

Q Is it more important in a screening environment to detect disease early?

A It's always important to detect disease early.

Q That's because the earlier you detect it --

A Regardless of the circumstances.

Q You have a little better shot at treating it, right?

A Correct.

Q Right. So, if you want to have a bias in a monitoring

program, it would be towards early detection, would it not?
A I'm not sure you want a bias. I'm not sure that's what they're saying, that they want to introduce bias.
Q Now, doctor, when you conducted your study, did you review any medical histories of any of these claimants?
A Myself? No.
Q Do you have any idea what their exposure histories were?
A No, sir.
Q Do you agree that a chest x-ray will not necessarily detect all cases of asbestosis?
A It is possible that in certain circumstances that would be the case, yes, sir.
Q And I believe you mentioned in your report that you have been at studies where you have -- I'm sorry -- you've been in conferences where you have observed very experienced qualified B-readers argue vehemently over the classification of a film, is that not correct?
A Over the classification of a film is 1/0.
Q Yes.
A Not over other classifications, but that particular threshold has been problematic for a very long time.
Q So, there is a great deal of disagreement, is there not, among the thoracic imaging community as to when a film is 1/0 or not?
A I wouldn't say there's a great deal of disagreement in the

community. I think everybody recognizes the difficulty and some of the pitfalls in making that determination. But, I wouldn't say there was a great deal of disagreement.

Q There was disagreement among your own readers as to whether or not films were 1/0 or not, was there not?

A Disagreement among our own readers is a healthy sign, I believe. It's a sign of their independent abilities. If they were all reading the same thing all the time, then one would be suspect if there was something wrong.

Q Do you know the number of times in your study when a -- one reader read the film as 1/0, whereas the other two disagreed?

A No, not off the top of my head, but that wouldn't surprise me.

Q Sixty-five cases sound too high?

A No. Again, you're going to have that when you read a large number of studies with three readers. You're going to have some disagreements and we recognize that. But, again, I think that portrays the independent behavior of the readers as a good sign that they are reading independently and not biased or being influenced one by the other. If they all read the same things all the time, then I would be very suspect that there was bias or there was some communication or something was awry.

Q All right. How many -- are you aware of the number of

cases in your study where the three readers -- all three disagreed on the classification of the film?

A Not specifically, no. But, I'm sure it happens.

Q How about 73 times?

A I'm not sure what you mean by disagreement. I mean, can you be more specific?

Q All three had different perfusion readings for the film.

A Well, that might be 0001010, which are all within two or three minor categories. So, disagreement of that scale is not necessarily a bad thing.

Q How many occasions did your readers agree on whether or not the film was completely negative?

MR. McMILLAN: Objection.

A Are we talking now about the individual readers or are we talking about the consensus reading here? What are you referring to?

Q Well, let's start out with individual readings.

A Well, we didn't conduct a study that actually looked at that. We conducted a study at the outset which determined that we would accept the profusion and the reading for the study as a majority reading. So, we're not looking at individual readers here. We're looking at the majority reading and that's what I reported on.

Q All right. Now, my question was, how many of your readers found the films were completely negative?

A I don't know. I don't have that information off the tip of my fingers.

Q Did you dally it?

MR. McMILLAN: I would object to the (indiscernible) to what he means by completely negative.

THE COURT: Yes, that's sustained. I don't understand the question either.

MR. BAILOR: There is a question on the ILO form that was on the screen earlier. I forget the number of it. But, it asks the question of the reader, "Is the film completely negative?"

Q Is that not correct, doctor?

A That's correct.

Q All right. Now, let's take the case of Dr. Parker. How many films did he find were completely negative?

A I don't know.

Q Would it surprise you to learn that he found 664 films were not completely negative?

A Well, that might be. I don't know.

Q And are you aware of the fact that Dr. Robert Tarver (phonetic) found 581 films were not completely negative?

A That's possible.

Q And Dr. Syder found 500 films were not completely negative?

A Well, I think it should be kept in mind that there are

other things on that study which would indicate that the film was abnormal other than a dust related abnormality.

Q It could also include pleural plaques, could it not?

A I think I eluded to the fact earlier that we already covered that there was approximately a 20 percent detection of pleural plaques.

Q And some of the readers noted cancer?

A I believe so.

Q And these were, of course, films submitted in conjunction with a claim for lung cancer, right?

A The readers didn't know that.

Q But, the films were submitted in connection with a claim for lung cancer, correct?

A That's true, but in some cases those patients developed cancer after the time the study was performed, or they had had surgery to remove that cancer. So, that's --

Q That's right. And you also excluded from your study the post-operative films where the lung cancer had already been removed, hadn't you not?

A We did that to prevent the confusion with post-operative or post-therapy changes, yes.

Q Do you agree with the American Thoracic Society's view that high resolution computed topography is much more sensitive than the detection of asbestosis than plain chest radiographs?

A Yes.

Q And you had no high resolution computer topography in your study, is that correct?

A We excluded them.

Q Now, going back to NIOSH's practice in contested proceedings, NIOSH recommends that there be agreement reached up front on the study criteria, do they not?

A I'm sorry. I'm not sure I understand you. Up front -- I think it suggests that you determine the number of readers at the outset. Is that what you mean?

Q Not quite. Could I invite your attention back to ACC/FCR/2041?

A Yes, sir.

Q I would like to invite your attention to Paragraph 3 on the second page. I'm sorry, Paragraph 4 on the second page at that exhibit. It says, "To avoid any implication of bias, it is necessary to specify from the outset the number of readers that will be used." Did you discuss the number of readers with the claimants?

A With the claimants? No, sir.

Q Do the claimants have any role in constructing the design of the study?

A No, sir.

Q Doctor, did you review any pulmonary function tests of any of the claimants?

A No, sir.

Q Do you agree with me that in order to make an accurate diagnosis of asbestos, you cannot make such a diagnosis solely from the chest x-ray?

MR. McMILLAN: I'm going to object to an accurate diagnosis of asbestos.

THE COURT: That's sustained.

MR. BAILOR: I'm sorry?

THE COURT: An accurate diagnosis of asbestos?

MR. BAILOR: I'm getting it myself.

Q Do you agree, doctor, that you cannot accurately diagnose asbestosis based solely on a chest x-ray?

A Certainly there are findings which would be consistent with that diagnosis, but it is not a diagnostic study.

Q And would you agree that in order to diagnose asbestosis there should be a physical examination performed?

A That's not within the realm of my expertise, sir.

Q Do you know how many of these claimants actually, in fact, have a asbestos-related condition?

A No, sir, I don't.

Q And how does this assist this Court in making an estimation?

A My responsibility, basically, was to evaluate the studies that I was given to evaluate in terms of the presence or absence of, in this case, an interstitial (indiscernible) processor asbestosis which is what I've done.

Q So, based on what -- you can provide no information at all as to whether or not any one of these individuals has an asbestos-related condition?

A It's not within the purview of imaging to do that under any circumstances.

MR. BAILOR: Can I have a moment, Your Honor?

THE COURT: Yes, sir.

MR. BAILOR: No further questions, Your Honor.

THE COURT: Mr. Mullady, how long will you be, Mr. Mullady?

MR. MULLADY: Ten, 15 minutes.

THE COURT: Would you like a ten-minute break first, doctor? Do you want to keep going? All right, Mr. Mullady, go ahead.

MR. MULLADY: I'm just pausing for a moment to let Mr. Ryan get set up, Your Honor.

THE COURT: All right.

MR. MULLADY: The Court's indulgence.

CROSS EXAMINATION

BY MR. MULLADY:

Q Dr. Henry, good afternoon.

A Good afternoon.

Q I represent the interests of future claimants against Grace. Your study involved films submitted by current claimants against Grace, obviously, correct?

A Yes, sir.
Q You're not here to opine that because only seven percent of the films of current claimants were read by your readers as having reliable radiologic evidence of asbestosis or damage to lung tissue, that that means that only seven percent of future claimants against Grace will have such evidence, are you?
A I can only comment on the studies that I perform.
Q You're not here to make any such extrapolation and you haven't done so, is that correct?
A No, sir.
Q Now, you also have no opinion on how many of the 93 percent of current claimants whose films the Grace panel found to be negative would have obtained a second x-ray had they taken their cases to trial against Grace, correct?
MR. McMILLAN: Objection. That calls for speculation, Your Honor.
THE COURT: He's an expert. That's what he does.
A One more time, please?
Q Sure. Of the 93 percent of claimants --
A Ninety-three percent who had negative findings by our readers?
A Yes. You're not here to say, and you're not here to opine that 93 percent of -- that that 93 percent would not have obtained a second x-ray had they taken their cases to trial against Grace?

A I have no opinion about that.
Q And you have no opinion about how many of those claimants would've been able to obtain a positive x-ray had they endeavored to obtain additional x-rays, is that fair?
A No, I don't have an opinion on that, no.
Q Okay. Now --
MR. MULLADY: Do we have the Elmo on? If we could go to that, please.
Q Putting GG-2087 on the Elmo. This is your slide depicting the process used in the Henry study. Do you recall this?
A Yes, sir.
Q You started with 5,438 claimants who alleged radiographic evidence of asbestos-related disease, correct?
A That's correct.
Q But, of those 540038, only 2857 had submitted x-rays with certification and demographic information, correct?
A That's correct.
Q So, only 2800 of the 5400 actually submitted films that you could even review?
A Well, there were more than that, but some didn't have proper identification. Some didn't have the proper certifications. Some didn't meet the deadlines prescribed by the Court.
Q Fair enough. But, in any case, that's over half of the claimant population that you study. I represent to you it's

about 52 percent, is that -- sound right?
A Of the original persons identified on the PIQs, yes.
Q Right. Now, you're not here to opine that 52 percent of future claimants who will be claiming against Grace will have no x-rays to support their claims?
A No, sir, I'm not.
Q Let me ask you some questions about opinions that I think you are here to offer. Do you agree that if a qualified B-reader assessed a patient's chest x-ray with a profusion rating of 1/0, that that would be a clinically significant finding that the patient's malignancy may be attributable to asbestos exposure?
A That's not my area of expertise, sir. I have no opinion about that.
Q Okay. Do you have an opinion as to whether a clinician holding an x-ray with a profusion rating of 1/0 should or should not ignore that assessment just because another B-reader disagrees?
A In other words, the B-readers don't agree on the profusion? Is that what you're saying?
Q Right. Does that make the first profusion any less clinically significant?
A I would probably get a third reading.
Q Do you agree that reasonable B-readers can disagree as to whether a given x-ray should be assessed at an ILO rating of

1/0 or higher?
A I think they can disagree at 1/0 at a higher level that's less likely there would be disagreement.
Q It's a question of fact, isn't it, whether a particular x-ray should've been assessed at a 1/0 rating or higher?
A I'm sorry? I don't understand.
Q It's a question of fact, isn't it?
MR. McMILLAN: I'm going to object that he's asking for a legal question of the witness.
THE COURT: Sustained.
Q Doctor, I'd like to ask you some questions about x-ray quality which is a topic that you addressed in your expert report.
MR. MULLADY: If we could have ACC/FCR Exhibit 476, please? And we'll have to switch off the Elmo.
Q You wrote on Page 14 of your October 2006 report on this issue of x-ray quality, doctor, that "Film quality has plagued the classification process for decades and is a factor in reader variability." Do you see that?
A Yes, sir.
Q Do you stand by that statement?
A I do.
Q Poor film quality can lead a reader to over or under read, correct?
A That's correct.

Q Do you agree that it is harder to get a good quality x-ray from a larger person?

A You meaning larger, meaning BMI, meaning six-foot seven, meaning --

Q Well, let's take you to the place in your report where you refer to this, Page 14, where you were discussing larger individuals. "Film quality in larger patients is always a challenge," you wrote. "Many workers who perform physical labor are large people." Did I read that correctly?

A That's true.

Q And that was your opinion at the time?

A It is.

Q I assume it still is.

A It is.

Q It's a major challenge to maintain -- excuse me. Another issue with obtaining a quality x-ray is whether the equipment is properly maintained, is that correct?

A That's correct.

Q And I think you addressed this at Page 15 of your report where you wrote that "It is a major challenge to maintain equipment in a portable environment in sufficient working order to obtain good quality x-rays."

A That's true.

Q Small facilities like private doctor's offices, factories, and other non-healthcare facilities struggle with film quality,

isn't that correct?
A That is true.
Q Doctor, on the issue -- shifting gears here again -- on the issue of the number of B-readers that is necessary or recommended in contested proceedings, I want to go back to two slides that you showed us. And you prepared these slides yourself as opposed to counsel, is that correct?
A I'm sorry?
Q These demonstratives that you used in your testimony, you prepared these yourself, right?
A I participate on their development, but I did not prepare them.
Q I see. Well, I want to ask you about one statement on 2083, "X-rays should be classified by three independent readers." Do you agree with that statement?
A Yes, sir.
Q Under the NIOSH recommendations?
A For contested reading, yes, sir.
Q Is this a derivation of that statement, GG-2082?
A That's from the same area of that report, yes. Yes, sir.
Q And this slide, unlike the prior slide, actually quotes from the NIOSH publication, correct?
A That's correct.
Q And this slide states, "NIOSH recommends a minimum of two independent classifications by appropriately selected readers

with a third classification if the first two disagree," correct?

A That's correct.

Q That's a little different than saying that x-rays should be classified by three independent readers, isn't it, sir?

A The bottom line is, that for practicality sake, recognizing that the inter-reader variability, that there's going to be a necessity to have a third reader. And we may have taken a little bit of license there, but the bottom line is in finishing out that sentence, that a third reader would be called in to determine if there was a disagreement.

Q A little bit of license.

MR. MULLADY: I have no further questions. Thank you.

THE COURT: Doctor, please, can you explain from the corpuses of your study for me, please, the significance of the 1/0 read?

THE WITNESS: The significance?

THE COURT: Yes.

THE WITNESS: If a chest x-ray is determined to demonstrate a profusion of 1/0, that is alleged to indicate the earliest signs of an asbestos or another occupational lung disease affecting the lung tissue. It would be the earliest stages of what is probably a fibrotic process. However, it should be kept in mind that this is a non-specific study that

many things present similar findings. Many other things other than asbestos produce a fibrotic reaction in the lung. So, while we find that 1/0 is a threshold that's been commonly employed to say that somebody has the earliest signs of an asbestos-related disorder in this venue, that it is, however, not specific.

THE COURT: And you used 1/0 as the test that you were -- for your purposes for what reason?

THE WITNESS: We use that because it was recommended by the 2004 ATS guidelines which are currently, I guess, the point of the realm.

THE COURT: All right. Thank you. Anybody have any questions as a result of the questions I've just asked this witness?

MR. MULLADY: No, Your Honor.

THE COURT: Anything further?

MR. McMILLAN: Brief redirect, Your Honor.

THE COURT: Limited to the recross?

MR. McMILLAN: Yes.

THE COURT: Okay. Or, I'm sorry. This is redirect. I apologize -- wrong witness. I'm sorry.

MR. MULLADY: Your Honor, if this is going to be more than a few minutes could we take a short recess?

MR. McMILLAN: I imagine it will be ten to 15 minutes, but I'm happy to do a short break.

THE COURT: Let's take a ten-minute recess. We'll take a ten-minute recess.

MR. MULLADY: Thank you, Your Honor.

MR. McMILLAN: Thank you, Your Honor.

(Recess)

THE COURT: Mr. McMillan. Doctor, ready? Okay.

REDIRECT EXAMINATION

BY MR. MCMILLAN:

Q Dr. Henry, do you recall being asked questions by Mr. Bailor relating to the NIOSH standards that would apply to worker surveillance classifications as compared to contested matter classifications?

A Yes, sir.

Q And if you had a matter that was a worker screening and the result of that screening was to be used to press a claim in court for asbestos-related disease, which classification system would apply to those types of screenings?

MR. BAILOR: Objection. Calls for a legal conclusion.

MR. McMILLAN: Your Honor, I think I'm asking the exact same question as Mr. Bailor.

THE COURT: Well, he may have, but if you ask the same question then it's been asked and answered. Otherwise, the way you asked it, it calls for a legal conclusion. Sustained.

MR. McMILLAN: Okay.

Q Dr. Henry, when you have a worker surveillance screen that only calls for one classification, is that the type of matter where the claim is then used in a contested proceeding?

A It's possible.

Q If the claim was a worker screening, but the intent was to use the result of the worker screening to press in a contested matter, would the contested matter classification guidelines apply?

A I would think so. If you were going to move into that venue, yes, then I think the contested guidelines would be appropriate.

Q And certainly when you conducted your study in this case, this is a contested matter, right?

A There's no question.

Q So, what was the appropriate procedure for you to follow when you were designing the guidelines for your study?

A Well, we employed the contested reading guidelines of multiple readers.

Q Mr. Bailor also asked you a little bit about inter-reader variability, and specifically about some of the variability in the reads of your independent readers. Do you recall that?

A Yes, sir.

Q I want to talk a moment about when you have readings at 1/1. When you have readings at 1/1, would you expect more

agreement then when you have readings at 1/0?
A Yes, sir, I would.
Q And would you expect less variability among your independent readers at 1/1?
A Yes, I would.
Q Would that be in part because there's a 1/1 standard?
A In part, yes.
Q And what would other reasons be why you would expect less variability at 1/1?
A I think there's a less arbitrary decision on the part of the interpreter to arrive at a 1/1 classification.
Q So, would you be more confident in results where you had replicated 1/1 readings?
A Personally, yes, I would.
Q Now, would you expect there to be more variability at 1/0?
A Yes, I would.
Q And is that expected because of the understanding that people who are B-readers have about inter-reader variability?
A There is some -- probably some contribution from inter-reader variability, but it plays to the concept of the 1/0 as being an arbitrary decision. Since there is no 1/0 standard, you're almost inviting inter-reader variability.
Q Is that one of the reasons that you use three B-readers?
A Yes, sir.
Q And the point of that is to minimize variability by having

multiple people look at the x-ray?
A It's to address that fact, yes.
Q And is it more critical, then, to follow the NIOSH recommendations and ILO standards when you're looking at a film that is a 1/0 where accuracy is even harder to attain?
A Well, I don't know that it's more important. I mean, certainly it would seem appropriate to do so. I think it's appropriate to follow the guidelines at all levels, but I think it would be most advantageous, or probably particularly advantageous at low level of profusion.
Q Let me phrase it a different way. At low levels of profusion, would failing to follow the guidelines have a higher propensity to result in variable readings?
A Which guidelines now?
Q The ILO and NIOSH guidelines.
A In terms of multiple readers?
Q Well, I'm just saying if you add lower profusion levels, if you fail to follow the guidelines, is it going to result in greater variability?
A Yes, I think it would.
Q Doctor, Mr. Bailor asked you briefly about whether or not you use CTs or HRCTs as part of your study. I believe you said you did not.
A I did.
Q Why is that?

A Well, first of all, there are no standards for the interpretation of a CT scan as it relates to the evaluation of an occupational lung disease. Some people use a slice thickness of ten millimeters, some might use five, some might use three. It's hard to compare a standard CT done in, say, five or three millimeters to a high resolution study which is done at a one millimeter slice thickness. So, you're all over the map regarding what the technique employed might be.

Q So, that is what -- you're saying there's no technique standardization?

A There is no technique standardization for either CT or HRCT as it relates to the evaluation of industrial-related disorder. It's up to the individual, whatever is a prevalent process at a particular institution or whatever. Whether they do them supine, that is with a patient laying on the back or where they turn the patient over and do the prone which is absolutely necessary, in my opinion, for patients in this particular area.

So, recognizing the fact that there's no standardized technique for the performance of these studies regarding slice thickness, positioning, how much we're going to look at. We're going to look at the entire lung, the bottom of the lung, parts of the lung, et cetera, it's an open book. Secondly, to the best of my knowledge, there is no agency out there that's authorizing anybody to read HRCT or CT, and the same way that

there's an agency which stipulate the people have proficiency in reading chest x-rays as B-readers.

Q So, has the ILO and NIOSH or any other government agency issued any standards for the technique to conduct CTs or HRCTs?

A No.

Q Has NIOSH, ILO or any other government agency issued any standards for how to interpret CTs or HRCTs for pneumoconiosis?

A No.

Q You mentioned earlier the lack of standardization in the technique.

A Yes.

Q Is there any problem with lack of standardization in the interpretation of x-rays for -- or, sorry -- CTs or HRCTs for pneumoconiosis?

A Well, again, it relates to the technique. The technique would be integral to how that standard would be implemented in terms of what part of the lung you were examining, whether you were examining the patient in a particular position, how many slices would you look at? I mean, with the chest x-ray you have one image and that's all you have to deal with, but with the CT, you can have multiple images. And so, the problem might arise of, well, what if we finding on one image, but it's not on the other image at a different level of the lung. Is that a significant finding, is it not? And nobody really knows the answer to that.

So, while I think CT is a very promising tool as HRCT is, there are still a lot of significant challenges out there regarding standardization, the protocol for the technique, the interpretation and so forth that have yet to be resolved.

Q Now, in terms of the study that you did, you were examining chest x-rays that had been submitted by these claimants, right?

A That's correct.

Q And you were comparing them to your independent read?

A That's correct.

Q So, the comparison of your reads to the claimant readers reads, whether or not they were HRCTs, does that have any impact on the validity of the comparison of your reads versus the claimant reads on the exact same chest x-rays?

A Well, our study was based on the comparison of the chest radiographic readings. It had nothing to do with CT or HRCT.

Q One last point, doctor. You were asked, I believe, by Mr. Bailor about the box on the form to check whether or not the x-ray was completely negative or not.

A Correct.

Q And I believe what you said is that there are other things on the ILO form that do not relate to asbestos.

A That's true.

Q Was that what you said? So, if someone checks the box that says, "This is not completely negative," does that mean

anything for whether or not the patient has an asbestos-related abnormality?

A No.

Q In fact, the population that you were looking at is a population of cancer claimants, right?

A Correct.

Q So, in general, what would your expectation be about the level of abnormality in a population, all of whom had cancer, many of whom had lung cancer?

A Then I would expect the significant number of the studies to be abnormal, and them to check that off as being abnormal.

MR. McMILLAN: I have no further questions, Your Honor.

MR. BAILOR: Very briefly, Your Honor.

RECROSS EXAMINATION

BY MR. BAILOR:

Q Doctor, determining whether or not a chest x-ray is negative or a positive, that is 1/0, or negative, that’s really a matter of opinion in many cases, isn’t it?

A It shouldn’t be a matter of opinion. I mean, it should be that you function within the guidelines of the ILO system utilizing the standard -- the radiographs. So, it’s more than an opinion. I mean, there should be some scientific process going on that’s based upon training and so forth.

Q But, you have testified there is no standard for 1/0,

correct?
A There is no radiographic standard for 1/0, that's correct.
Q And the radiologist has to make a decision and form an opinion as to whether not that radiograph is 1/0?
A Well --
MR. McMILLAN: Objection. Compound.
THE COURT: No, that's not compound. Overruled.
A The process would be, typically, to put the, say, the claimant chest x-ray up on a view box and to put the standards next to it of what she would reconsider either normal or abnormal. In this case, 0/0 and 1/1, and then make a determination based upon your skill or whatever as to whether it did reach the level of 1/0.
Q And your skill or whatever includes your judgment?
A In that case, yes, sir.
Q Okay. Now, reading a CT and HRCT is a matter of judgment, too, isn't it?
A Yes, sir.
Q And a radiologist reading a CT scan or a high resolution computer topography can also have an opinion as to whether or not it demonstrates asbestos-related disease, can he not?
A Yes, sir.
MR. BAILOR: No further questions, Your Honor.
THE COURT: Mr. Mullady?
MR. MULLADY: No questions.

THE COURT: Any --

MR. McMILLAN: No further questions, Your Honor.

THE COURT: You're excused, doctor. Thank you.

MR. BERNICK: Your Honor, I believe that that is our last live witness. We have matters to present to the Court tomorrow by deposition, and Ms. Harding, and perhaps Mr. Finch and Mr. Mullady can describe that, but we are done with the live witnesses that we have prepared for today and tomorrow. The examinations were on schedule and fairly, you know, within schedule so that we're moving along just fine, so that's not a cause for concern. I think that things are moving along just fine. But, tomorrow we will have prepared -- it's not prepared now -- a package to present to the Court, and if it would be appropriate and Your Honor wants to learn about it, I'm sure that Ms. Harding can explain what's going to be happening so that you're prepared.

THE COURT: That might be helpful so we can, perhaps, go through that now rather than in the morning.

MS. HARDING: Good afternoon, Your Honor.

THE COURT: Good afternoon.

MS. HARDING: We're currently scheduled to present by deposition testimony, the testimony of eight doctors and screeners who have created medical evidence that has been offered by the -- some of the claimants in this case. Per the CMO, we have designed our portions of the transcript that we

want to play for the Court. The other side has counter-designated, and we have prepared binders for the Court with all of the information, including our designations, their designations, any objections that either party had, as well as the exhibits that are implicated by the testimony and any -- and objections, if any, to those exhibits.

So, those are prepared. They're ready. We'll give those to you as soon as we conclude today. In the meantime, though, we've also -- that would -- if we played all of that, if we did all of that tomorrow, all of the designations would probably take the whole morning and a good part -- at least part of the afternoon -- at least over four hours or so.

We've met and conferred -- the ACC, the FCR, and the debtors have met and conferred, and we have agreed to, if it's -- if Your Honor wants to proceed this way so as to save court time, we have agreed to just play portions of each witness that we -- each side chooses. So, for the debtors we've chosen roughly a total of 45 minutes total from the entire list of designations that we've made that we would play for the Court. And the ACC and the FCR plan to counter-designate a similar amount of time tomorrow, and the entire -- but the entire testimony that the Court would want to consider at some point will be offered.

So, that's the way we intend to proceed if that's the way Your Honor would like us to proceed. We were trying to

kind of keep it efficient and keep the court time down on that issue.

THE COURT: Well, here's the problem. And I agreed to let the parties in Federal-Mogul do that. But, the trouble is, at the end of the day I still have to go through it all, and frankly, it's harder to do it in the office then it is to do it in court because then, all I have are boxes of documents and CD-ROM, and it's much more difficult to get the time to do it there then it is to get the time to do it here. So -- because things like this trial interfere. Well, I mean interfere with that case, I don't mean interfere with this case, obviously. You know, you need the time and I'm -- I didn't mean character assertions by any means. I just mean that in trying to figure out how you're going to budget your time, you have to budget the time. And you can only do one thing at a time. So, I can either do Federal-Mogul or I can do this, but I can't do both at the same time.

MS. HARDING: I understand, Your Honor.

THE COURT: All right. So, I would say that if you really want to get this case done in the most expeditious fashion, much as I hate to say this because I can read a whole lot faster than I can listen, it would probably be better to just do it all in sequence tomorrow.

MS. HARDING: That's what we'll do, Your Honor.

THE COURT: I mean, and start with the witnesses.

MS. HARDING: If that's what you'd like, that's what we'll do. Okay.

THE COURT: So --

MR. BERNICK: So, that would mean that Your Honor would actually rule the objections. How would you prefer, then, that the matter be put before the Court? Do we just have people read and offer documents?

THE COURT: Well, I haven't seen what you're going to do, so I'm not sure. These are all just deposition transcripts with --

MR. BERNICK: Yes. They are marked up deposition transcripts. The only portion that has been -- well, I suppose we could do the whole thing by video, but I think that the videos have been focused on portions of the transcript. You say that Barb, but are you sure that you --

MS. HARDING: We can do both. We have video that we could do either the snippets -- we can do the video of the entire presentation where there is video available. There's one transcript where there's not video available.

THE COURT: Videos take an awful long time.

MR. BERNICK: Yes. They take an awful long time. And the difficulty, then, is you have to then make the objection and, you know, before the thing rolls on, and then the Court has got to rule. So, what would be your -- we do want to show some of the snippets of the people.

THE COURT: Yes. And I would like to see some. But, I don't see why we have to do the whole thing by way of video, especially if you get into some long argument in a deposition that's basically not going to be relevant to what you're arguing about here.

MR. BERNICK: Then what I would propose, if this is agreeable to everybody, is that in order to get through the transcripts most quickly, we should begin at the beginning of the transcripts and go through and basically take, you know, Q's and A's, have it read, and Your Honor rule on the objections. The alternative is to proceed by counter -- by designation and counter-designation in which case you're flipping back and forth which is --

THE COURT: Doesn't make sense.

MR. BERNICK: It doesn't make any sense. So -- I mean, it's very -- I think that it's -- probably the fastest way to get through is you literally begin at the beginning of the deposition. Somebody will be the reader. It doesn't have to be either side. Somebody could be the reader -- designated reader -- question and answer objections made, it comes in, doesn't come in, and we just go through the transcripts in that fashion.

THE COURT: All right. Well, with respect to the objections, and this is why I'm asking, sometimes you make objections for purposes of --

MR. BERNICK: Yes, I know.

THE COURT: -- discovery depositions that have absolutely nothing to do with the trial objections. So, are you saying that every objection that you raised in the course of these depositions are things that you're now going to raise at trial?

MR. BERNICK: No. Well, that shouldn't be the case. It should be the case that people have exercised in judgment about what it is that you're going to be objecting to. I do think that it probably makes sense in light of the fact that this is not going to be an (indiscernible) exercise, that it probably makes sense for both sides to go through the transcripts tonight and figure out what objections they really want to press because I'm assuming that Your Honor will then expect the objection to be made and ruled upon in court before the reading continues.

MS. HARDING: I think, and they can correct me if I'm wrong, but I think that the -- I think they've already -- the ACC and FCR have already identified the portions that they're actually going to object to, and we don't have to worry about the ones that are on the transcript.

MR. BERNICK: No, that's not the point. The point is that if you read the transcript the objections are going to come up as the transcript is read. So, whoever's reading it, it'll be marked and then they'll make an objection. And all

that I think is that in order to save the Court's time, we ought to make sure, as I understand Your Honor's suggestion to us, we want to make sure that those objections are real objections that warrant taking up the Court's time as the transcript is being read.

THE COURT: Well, I guess the question -- let me phrase it this way. Let's assume that the deposition starts on Page 1 and goes to Page 20. The first objection comes up on Page 5, Line 5.

MR. BERNICK: Right.

THE COURT: And nobody really cares about that objection anymore. Then I would assume that Page 5, Line 5 is no longer part of the designation that anybody has had in the transcript because it's an objection that nobody cares about, so it shouldn't be part of the designated portion any longer.

MR. BERNICK: You mean the objection itself?

THE COURT: Right. Or -- right. The objection itself. So, it should be stricken and then we don't have to read it and it's not something that anybody has to worry about. Has it been done that way?

MR. BERNICK: No.

THE COURT: Have the designations been done that way?

MS. HARDING: No, they have not, Your Honor.

MR. BERNICK: I suspect that the designations are actually Q's and A's, and that there's then an objection noted

by way of bracketing the question and answer or whatever it is, and I think that then what will -- what ought to be read is the question. If somebody has an objection to the question, it gets stated in court, and then Your Honor rules and then the answer comes in or it doesn't come in depending upon the ruling.

But, I really do think that it makes sense for people to go back tonight and -- I know I want to go back tonight and make sure that the depositions are worth taking up, you know, live court time to be pursued.

MR. FINCH: Well, then, what happens -- I'm not sure I understand. It seems like there's two things --

THE COURT: I can't hear you, Mr. Finch.

MR. FINCH: I'm not sure I understand what's going on. They have videotaped depositions and then we have transcripts. And we have tried to be sparing both as to what we objected to and as to what we counter-designated. And what I think they're saying is that you basically start at Page 1 of the transcript and you'd have somebody read the portions that have been designed from Page 1 to Page, you know, whatever the end is. You know, there -- whether it is their designation or our counter-designation or whatever it is, and if an objection comes up during that process that anybody cares about, you rule on the objections right then and there.

What I'm not clear about is how the videotape relates

to that exercise. And so, I guess I want some clarification from counsel for the debtor as to how --

MR. BERNICK: (Indiscernible) because we thought that it was going to be played in court. It would present some element of duplication, and as a consequence, my own feeling is that we ought to do is, we ought to go through the deposition transcript, reading it in court as Mr. Finch indicates. And then at the conclusion of reading the deposition, if there are particular -- there's particular little clips that show the witness, you know, either in his or her finest or his or her most embarrassing moments, provided that it's come in, the Court can get a short viewing of the video clip. Does that make sense to the Court?

THE COURT: Well, are any of the portions that we're going to be shown in the depositions -- the video depositions, portions that are objected to? Because if the purpose is to let me see the witnesses -- and frankly, I would like to see the witnesses because it's a little easier when you're going back six months later to put a face to the name and the testimony, so I would like to see at least portions of them or have maybe a clip of the video --

MR. BERNICK: During the reading.

THE COURT: -- just so there is -- yes. Just submit it so that --

MR. BERNICK: We will try to do that.

THE COURT: -- there is a recollection available later.

MR. BERNICK: I think we'll try to do that. I'm not sure how many objections there really are during --

MS. HARDING: Well, we had selected video portions that did not -- that were not -- they were not objected to by the other side.

MR. BERNICK: Okay. Well, then we'll -- as we get to them and the transcript --

THE COURT: Just show --

MR. BERNICK: -- we will just show them instead of reading the transcript and we'll reflect what portion of the transcript is appearing by video. We'll play the video, and then we'll move on. If you all have -- if during your portions and you want to show by video, you aren't as fortunate and there are numerous well-taken objections. Yes, I guess we'll have to stop the video and get the ruling on the objections. But, then the monkey's on our back to then object during the course of the video being played and we'll just have to do that if there are objections to your portion, that's all.

THE COURT: All right. It would seem if the person -- if the purpose is to show the witness, then, a very short snippet's going to do it, I think.

MR. BERNICK: Yes.

THE COURT: If the purpose is that you've got some

particular portion of what the witness looked like, how he or she reacted, that you'd want me to see, then I may need it in a context of the objection. Typically speaking, I don't think I need the witness there while the objection's going on. That's usually a legal ruling, so I don't know why I need to see the witness during the objection which typically shouldn't involve the witness anyway.

So, if that -- if the portions that involve the objections can be done by deposition, and the portions that involve non-objected to testimony can be done by video, I think we might get through it a little quicker. And if we can do this at least for tomorrow and see how it goes, if it's really too painful, then I may see if we can work something else out in the future. But, I know the experience that I'm having with Federal-Mogul is that I'm sorry that I did what I did because it's just too voluminous a record and it's just too difficult to get through.

MR. BERNICK: It's too easy, also, for the lawyers to say, well, we just --

THE COURT: Yes, here it is.

MR. BERNICK: -- designate the whole thing, yes.

THE COURT: Yes. And that's another problem. So, at -- frankly, you ought to do the work.

MR. BERNICK: Yes, right. So -- but, I think it might be also wise if our technical people got coordinated

after court here so that we maximize the chance that people's video clips can be queued up very easily and we can kind of go through and do it.

MS. HARDING: Okay. We'll work it out, Your Honor. I think -- I mean, Nate, any other questions? All right.

THE COURT: All right. So, is there anything you're going to need back from me today still or no?

MS. HARDING: No, Your Honor. We'll just -- we'll hand up the full binders with all the designations. You can have those today and then --

MR. FINCH: Oh, actually, I would like to check those before we --

THE COURT: Hand them up. Yes.

MR. FINCH: -- submit them.

MS. HARDING: Oh, absolutely.

THE COURT: Okay.

MS. HARDING: Okay.

THE COURT: Now, based on the fact that we have to end tomorrow, do you want -- and you're all here -- do you want to start at eight-thirty or are you going to have enough work to do that you still want to start at nine? I know you're coming from all over.

MR. BERNICK: Well, Barb, I don't know -- do you think how long it's going to take to read through all this stuff?

MS. HARDING: I think based on the way that we've wittled it down both sides, I think we'll be done by lunchtime, Your Honor, no matter how we do it.

THE COURT: Oh, all right. So, do you want to start at nine, then?

MR. BERNICK: So, we have to get designated readers with charming voices and -- we don't have a jury, so we don't need to worry about --

THE COURT: Yes, you may want to switch, too. People can sometimes get tired, so -- okay. We'll be in recess till nine o'clock, then. Thank you.

MS. HARDING: Thank you, Your Honor.

MR. BERNICK: Thank you, Your Honor.

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**C E R T I F I C A T I O N**

We, Patricia Repko, Lynn Schmitz, Denise O'Donnell and Kathleen Betz, court approved transcribers, certify that the foregoing is a correct transcript from the official electronic sound recording of the proceedings in the above-entitled matter, and to the best of our ability.

/s/ Patricia Repko

PATRICIA REPKO

/s/ Lynn Schmitz

LYNN SCHMITZ

/s/ Denise O'Donnell

DENISE O'DONNELL

/s/ Kathleen Betz DATE: January 25, 2008

KATHLEEN BETZ

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